Simulated Emergency Test (SET)-2017
Boone County, Missouri - ARES (BCARES)

This year (2017) BCARES, in conjunction with the Boone County Office of Emergency Management (OEM), held the Simulated Emergency Test (SET) on October 28 from 10:00 -12:00. NCS was operated from the new Boone County Emergency Communications Center (ECC) inside the Joint Communications Center (911-dispatch). This was our first full exercise of our facility at the ECC, and it went very well, although not without one issue that was easily resolved.

Our two main objectives for this SET was (1) to confirm that we could cover all 29 Points across our 650 Square mile county (see Map page 3) with our amateur repeater coverage, and (2) to determine how much of the county could we cover on a Simplex frequency contacting ECC from these 29 points.

Twenty-one amateur radio operators participated in the exercise with 15 of these operating from 13 mobiles to cover all 29 points in two hours. Three monitors operated from fixed stations to receive reports from the mobiles. One of these operated from the Boone County Hospital radio room, one was fixed in the neighboring county (Callaway), and the third operated from his home station. Three operators manned three radios at the ECC running three simultaneous nets. Our directed nets operated on the 146.76MHz repeater, the 444.175MHz repeater, and on 146.505MHz simplex.

Figure 1 Amateur radio facility at ECC with KG5NME, KKM0R, OEM Deputy Director-Tom Hurley, and WY0B.

The OEM had prepared and placed Drop point packets containing a surveyor flag (for easy identification by the Rovers), a structural damage report with photo, and our radio operator instructions for each of the 29 locations. The damage assessment report was to be delivered from the remote locations to specific monitoring stations via a specified repeater, and by simplex to the ECC. Certain mobile stations were given the challenge of passing this damage report via ICS 213 and Winlink Peer to Peer directly to the ECC on 144.910 MHz.

Figure 2 OEM's Drop Point #3 packet

We covered all 29 locations in our 650 Square mile county with 2 repeaters in 2 hours with little to no problems. One problem developed at the ECC when the 146.76 MHz station significantly interfered with the station operating simplex, 146.505 MHz. So, whereas the exercise began on the 146.76 repeater with a role call check-in, we announced that all traffic that had been designated for the 146.76 repeater be moved to the 444.175 MHz repeater, which the ECC could work simultaneously with 146.505 Simplex.
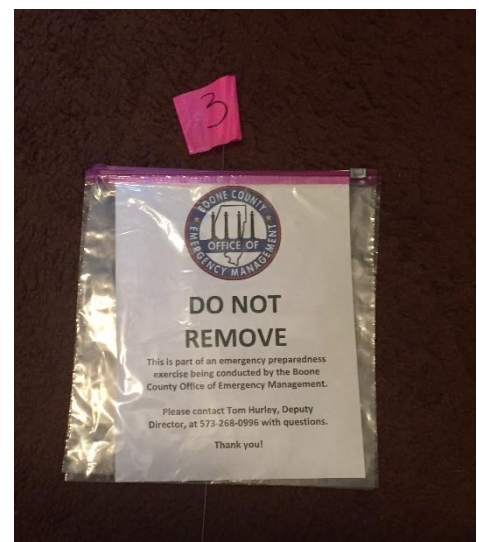
Our major test for this SET was to see how well can we cover the county from the ECC on simplex. (We knew just by looking that the five locations in the Missouri River bottom would not reach back to the ECC. Here we must rely on the 444.175 MHz repeater which was excellent.) We were unable to reach ECC on Simplex from seven of the 29 locations (6 from Rocheport to the Claysville Store along the Missouri River). But one or the other repeater filled in these locations so that messages were successfully passed from all locations.

We had 7 mobile APRS stations on our map (see Page 2) at Joint Comm, including 2 of the club stand-alone trackers that were deployed for the exercise. We were pleased to observe APRS packets from our mobiles even from the Missouri River bottoms (N0OFJ and KV0S).

We had 5 ICS 213's as traffic passed by Winlink P2P from Rover to ECC directly. We also received a monitor (KD0BVQ) report by Winlink to N0AXZ.

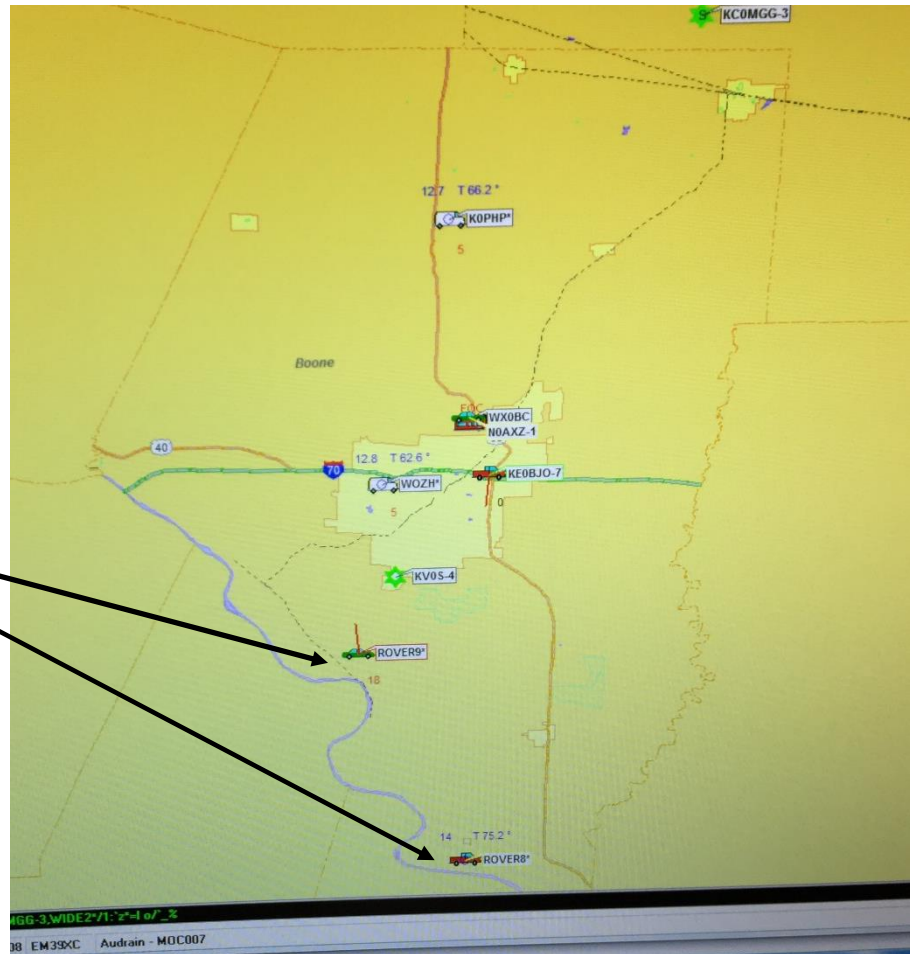See Page 4 for the ICS 205A showing participants and Tactical call sign assignments.

Figure 3 APRS map showing mobile stations covering the county, including the Missouri River bottoms.

Areas in need of more practice and training include:

Moving all traffic to 444.175 instead of 146.76: not perfectly done. Some still tried to use the 146.76 repeater apparently not hearing our announcement to move to 444.175 (or they didn't have UHF capability).

Monitor 1 lost: Although packet instructions said to call Monitor 1, after an announcement that Monitor 1 traffic should be diverted to Monitor 3, not all calls went to Monitor 3.

Handling traffic in a directed net environment: Not perfectly done, but very good as the exercise provided opportunities we don't practice very much. More practice handling messages over phone is needed.

The 29 Drop Points used for SET 2017.
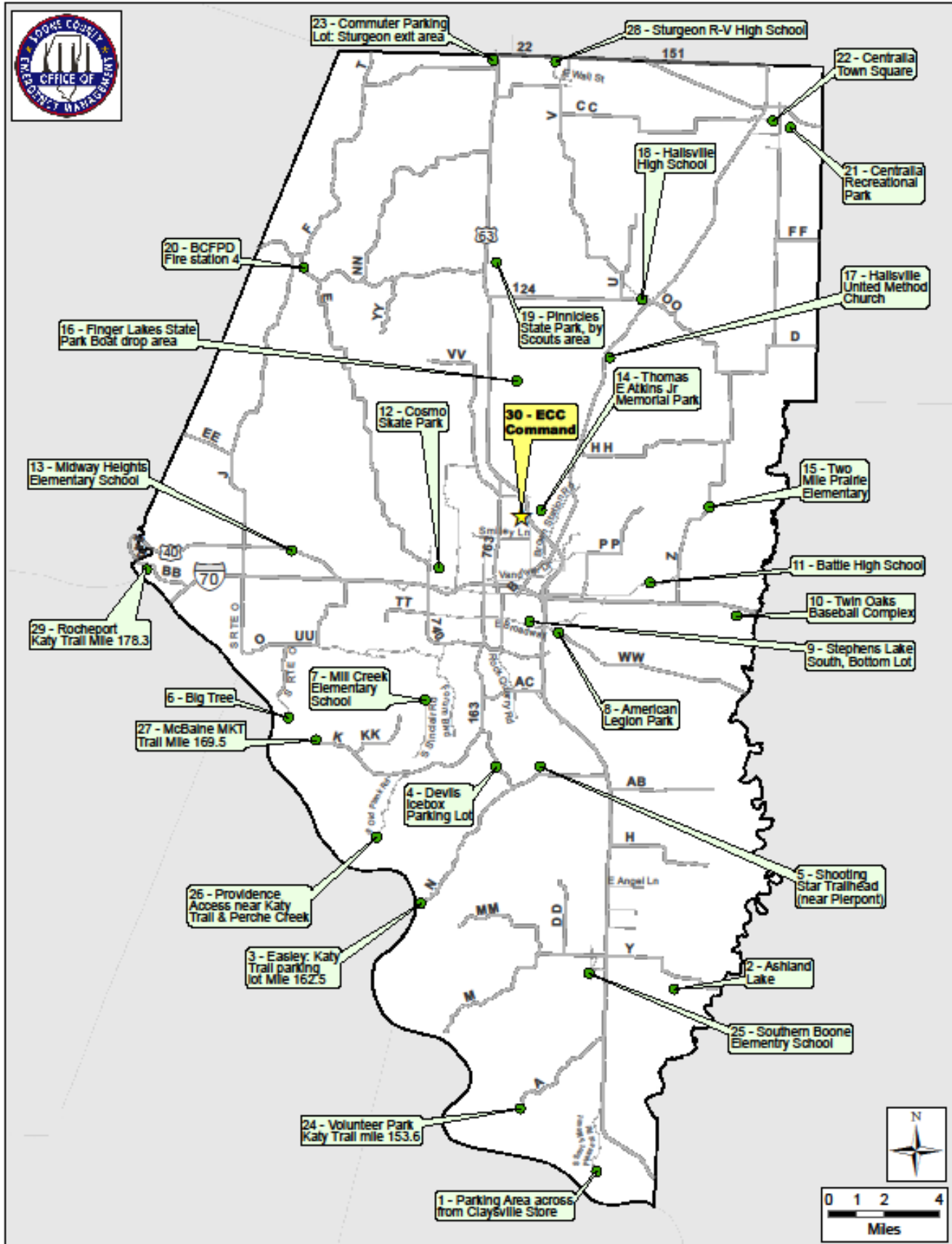
1. Incident Name: **2017 SET - BCARES**		2. **Operational Period:** Date From: Oct 28 Date To: SAME Time From: 10:00 AM Time To: 12:00 PM	
3. Basic Local Communications Information:			
Incident Assigned Position	Name (Alphabetized)	Method(s) of Contact (phone, pager, cell, etc.)	
ROVER 1	AC0MP – RICHARD	Loc 4, 5 573-823-xxxx	
ROVER 2	K0PHP - CHRIS	Loc 19 & 16 APRS Tracker	
ROVER 3	K0ATS – JERRY + KE0IKE - RICK	Loc 6 & 27 & 29 573-442-xxxx WINLINK	
ROVER 4	KE0DHO - BERNARD	Loc 2 & 25	
ROVER 5	KE0DFZ - JEREMY	Loc 9 & 12 417-840-xxxx	
ROVER 6	KE0FPP - DON	Loc 23, 28, 22 & 21 NO PHONE	
ROVER 7	WY0B - JIM	Loc 17 & 18	
ROVER 8	KV0S - DAVE	Loc 1 & 24 WINLINK, APRS	
ROVER 9	N0OFJ – JON	Loc 3 & 26 573-864-xxxx APRS	
ROVER 10	W0ZH – MYRON	Loc 7, 10 314-973-xxxx APRS Tracker	
ROVER 11	WD6BGN – RALPH + KA9MNZ - CATHY	Loc 13 & 20 WINLINK, APRS	
ROVER 12	WH6EB - PETER	Loc 11 & 15	
ROVER 13	KE0BJO – ERNEST	Loc 8, 14 573-864-xxxx WINLINK APRS	
UMW&C Monitor-1	KD0EAG – DAVE	Columbia 146.76R	
BHos Monitor-2	KD0BVQ – HANK	Airport UHF 444.175R / HVTac6 – 146.505 MHz	
Hallsville Monitor-3	KC0YNS – COREY	Columbia 146.76R / HVTac6 – 146.505 573-489-xxxx	
Callaway Monitor-4	KC0LYA – DAVE	Fulton 147.315R / HVTac6 – 146.505	
ECC - NCS	KG5NME - JORDAN	OEM 146.76R	
ECC - NCS	KM0R - DON	NCS Columbia 146.76R / HVTAC-6F=146.505	
ECC – NCS	N0AXZ	NCS Airport 444.175R, / HVData 144.910 573-424-xxxx APRS Winlink	
4. Prepared by: Name: N0AXZ_____ Position/Title: BCARES EC_____Signature: WDM_____			
ICS 205A	**IAP Page** _____	Date/Time: 5- November 2017_____	