

ARRL Ohio Section Message Routing Concept of Operations, ECNRS [Rev. E]

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May 25, 2020

1. Overview. ARRL Ohio Section ARES is participating in an American Red Cross (ARC) Emergency Communication Nationwide Radio Simulation (“ECNRS”) on May 30, 2020. The exercise has two parts:
  - a. “PART A” is a “local and optional” morning exercise where individual stations, counties, and districts may participate. This stresses establishing stations and exchanging messages via NBEMS.
  - b. “PART B” is an interstate exercise in the afternoon where participating County ECs will activate stations operating on emergency power, simulating their operation at a shelter. Those stations will send and receive messages via Winlink, preferably via RF but via Internet if RF is unavailable.
2. Timeline. All times Ohio Local (EDT)
  - a. May 18, 2020 Buckeye Net started a regular testing schedule.
  - b. May 20, 2020 Buckeye Net published its exercise SOI and fldigi macros.
  - c. May 28, 2020 KG4ARC, the Atlanta Red Cross winlink station, will send a 213 to the ARES Event Manager asking him to mobilize ARES ops to prepare for an impending disaster in their area.
  - d. May 30, 2020 0900 STARTEX PART A.
  - e. May 30, 2020 1200 ENDEX PART A.
  - f. May 30, 2020 1300 STARTEX PART B. First Inject.
  - g. May 30, 2020 1400 Second Inject.
  - h. May 30, 2020 1500 Third Inject.
  - i. May 30, 2020 1600 ENDEX. Debrief.
3. Intent. The exercise should demonstrate that ARES operators can use forms from the *flmsg* software and relay them using only amateur radio, and without infrastructure generally relying on grid power. PART B is focused on using ARC custom forms, populated by ARC shelter managers, using only Winlink for transport. PART A is optional and gives stations a chance to practice movement of messages with NBEMS, as well as interoperate with the rest of the Section.

4. Concept of Operations. Part A and Part B are two independent exercises.
  - a. PART A. Optional Exercise. The Ohio Section has chosen to use a single scenario.
    - i. County ECs are to issue a report to the SEC for relay.
      1. Participating county ARES organizations will have one or more NBEMS (fldigi and flmsg) capable stations operating on non-grid power positioned throughout the county, in a park, or in their yard at home.
      2. Deployed stations will be supported by county nets operating as if being without power for 12 hours. Repeater systems that will continue to operate under those conditions are fair game, but otherwise simplex operation is required. Deployed stations can write a report indicating their location, operating conditions, and something of interest. If you don't see anything interesting, send a weather report! Using local procedure, deployed stations should transmit their reports for other stations to copy.
      3. Counties can then collect reports from each station to see the coverage that each station provided based on which participating stations could copy their traffic.
      4. The county net will create a roster indicating stations that joined the net and their capabilities (non-grid power, NBEMS, Winlink, and NTS).
      5. The EC will create a message for the Ohio Section Emergency Coordinator N8BHL for RF-only relay. The message should be Radiogram or Plaintext format, available in flmsg. (The SEC is not a served agency and does not want ARES administration on agency forms.)
      6. The message for the SEC should include these elements:
        - a. The county participating,
        - b. How many stations are in operation,
        - c. How many stations are on non-grid power,
        - d. How many stations are NBEMS capable,
        - e. How many stations are Winlink RF (no telnet!) capable,

- f. How many stations are NTS capable,
  - g. How many pseudo (simulated) shelters will be in operation for the afternoon (PART B) exercise, and
  - h. The group's favorite videoconference system for staying in touch during pandemic.
- 7. The message for the SEC will work like joining the "3902" net and passing a message with NBEMS on OHDEN. W8SGT, an Ohio EOC station, will not be in operation for this exercise for an exercise of ARC, a different served agency. The routing of RF messages to the SEC will therefore use a different Ohio Section net, Buckeye Net—see 4(a)(ii) below.
- ii. The Ohio Section will provide BUCKEYE NET messaging service for exchange of messages between Districts, and beyond via NTS and Winlink.
  - 1. Stations operating in the morning should be part of County nets, and if there isn't one, they should be the County representative to the District.
  - 2. If there is no District net in operation, a County may go directly to the Section.
  - 3. Buckeye Net will be operating in support of ARES on May 30 from 0900 until 1200.
  - 4. Buckeye Net will control the net by voice on 75m and exchange traffic on 80m digital (NBEMS).
  - 5. Buckeye Net will provide liaison to NTS and Winlink.
  - 6. Buckeye Net has published Signal Operating Instructions and fldigi macros to ease operation.
  - 7. Buckeye Net has a regular practice schedule to help operators become familiar and comfortable with mixed-mode operation on HF.
- b. PART B. ARC/ARES Exercise.
  - i. Participating county ARES organizations will have one or more stations simulate an ARC shelter. The "shelter station" will be capable on flmsg and Winlink.

- ii. Shelter stations may operate VHF or HF for their connection to an RMS. If neither VHF nor HF can be used, the station may use “telnet” (Internet) service.
- iii. Shelter stations should expect to receive messages back via Winlink.
- iv. The instructions do not preclude the use of a relay station to exchange traffic with the shelter station via NBEMS (fldigi transmission) and the Winlink system and counties may do so. Note that the timeline is tight and relays should happen immediately.

5. Coordinating Instructions.

- a. Individual stations wishing to participate should contact their county EC to volunteer for participation.
- b. ECs should advise their DECs of their plans and any needs for the day.
- c. DECs should advise the SEC of their plans and any needs for the day.
- d. Buckeye Net Coordination. Stations wishing to participate in the Section net for the morning exercise of NBEMS:
  - i. Get the summary, SOI, and macros for “30MAY20 exercise” (under “Drills & Exercises”) at <https://buckeyenetweb.wordpress.com/reference/>.
  - ii. Participate in the regular training and practice sessions.
  - iii. Indicate your intended operation so we know to listen for you! Send email with your callsign and district to [kd8tte@pm.me](mailto:kd8tte@pm.me).

6. Status of District Liaisons to Buckeye Net for “Part A,” morning session. NB district might have no Part A participant.

- a. ARES District 1. Unknown.
  - i. Buckeye Net station WB8YLO will be in operation, cannot liaise.
- b. ARES District 2. Unknown.
- c. ARES District 3. Unknown.
- d. ARES District 4. Unknown.
  - i. Buckeye Net station KD8EUP will be in operation, cannot liaise.
- e. ARES District 5. Unknown.

- f. ARES District 7, Unknown.
  - i. Buckeye Net station KD8TTE will be in operation, cannot liaise.
- g. ARES District 8, Unknown.
- h. ARES District 9, Unknown.
- i. ARES District 10. Unknown.

7. References.

- a. Author Unknown. "May 30 2020 Nationwide Red Cross Radio Drill, Briefing Paper prepared March 22, 2020"
- b. Author Unknown. "PART B Framework EmComm Simulation, May 30, 2020," version "5-1-2020."
- c. S. Broadway N8BHL. "Ohio Red Cross Exercise May 30, 2020."
- d. Author Unknown. "Simulation Summary, Red Cross EmComm Simulation, May 30, 2020"
- e. R. Slabicky and W. Robertson. "Incident Action Plan & Simulation Narrative," May 22, 2020.