

- I. Overview. This is a training program for the Field Organization of the ARRL Ohio Section.
  - A. Through lightweight but regular activity, ARES organizations ensure that they can establish reliable communication within their Counties. This typically happens through a weekly ARES net. Ideally the schedule includes a combination of nets conducted through a repeater and simplex.
  - B. ARES organizations should similarly be able to reach beyond their Counties through liaison to their District nets, ensuring that communication with neighboring counties is possible. A county in operation will then have its county net in operation with all of its stations, and a designated liaison to the District net.
  - C. District nets in turn establish a liaison to the Section to ensure communication throughout the entire Section. Thus, through liaisons, the entire Section is kept in communication, while avoiding excessively large nets at the Section level, and ensuring that transmissions stay as local as possible to promote efficient use of the spectrum.
  - D. Where District nets do not exist, Counties still have a need to reach beyond the county and may therefore go straight to the Section net.
  - E. Counties can further develop by increasing the number of operators capable of performing that liaison function to higher-level nets.
  - F. ARRL Ohio Section ARES needs to build radio message handling experience, a Core Capability for emergency communicators.
  - G. Radio messaging capability includes tasks such as
    1. Originating, the creation of a message formatted for transmission;

2. Sending, the verbatim transmission of a message to another station for relay;
  3. Receiving, the verbatim duplication of a message being transmitted for relay; and
  4. Delivery, the creation of the received message for presentation to the addressee.
- H. Each task requires practice to make proper selection and use of, for example, message precedence and handling instructions.
- I. Each county ARES organization must establish connections by way of radio to other ARES organizations to ensure coordination in communications failures.
- J. Each county with an ARES organization has unique characteristics in geography, demographics, and served agencies.
- K. Ohio ARES leadership will issue messages and each county ARES group will receive them and issue replies.
- L. The National Traffic System (NTS) and affiliated system of nets, the automated Digital Traffic Net (DTN), formerly NTS Digital (NTSD), have been built for this purpose.
- M. ARES organizations need to ensure that they have working and reliable access to the traffic nets, both to inject messages, and to receive them.

II. Timeline.

- A. The project will begin in the month of July 2020.
- B. The project will conclude at the end of 2020.

III. Intent. The project will ensure that ARES can conduct its own activations, support, and other business purely on RF.

- A. This Project ASEC will be able to get written instructions by RF to each DEC.
- B. Each DEC will be able to send written instructions by RF to each EC.

- C. Each EC will be able to send a written message by RF back to the SEC.
- D. Liaison between county and district will be exercised weekly.
- E. Liaison between district and section will be exercised weekly.
- F. Each ARES county will build up the number of operators capable of providing liaison between the county and district. Where a supporting district net is unavailable, the county will establish liaison with the Section instead.
- G. Each ARES district will build up the number of operators capable of providing liaison between the district and Section.
- H. The Section will build up the number of operators capable of providing net control operators, Eighth Region, Winlink, and state agency liaisons.

#### IV. Concept of Operations.

- A. Each week the Project ASEC will issue a short message to each DEC, directing instruction to each EC to send a message to the SEC per specifications.
- B. The ASEC's message will be released on Buckeye Net (BN) Multimode session as Ohio Section NTS net in support of Ohio ARES. That net session will be held each Thursday starting at 19:00 Eastern Time.
- C. BN will provide stations for the conduct of business, including net control, 8RN, and others as needed.
- D. Each of Ohio's 10 ARES Districts will have a station designated by the DEC as Liaison to BN. The Liaison will take traffic designated for the DEC or any station in the District, and will bring traffic from any station in the District going out to another Ohio ARES District or beyond.
- E. DEC's may designate more than one liaison if needed. Where there are two liaisons, one can be on BN releasing District

traffic to the Section or taking Section traffic to the District, while the other liaison is on the District net releasing traffic to Counties or taking County traffic for the Section.

V. Coordinating Instructions.

- A. ECs: Designate a station (or stations) to serve as liaison between the county and the District. Ensure that the stations are able to operate by District net procedures. Where the District has no net, designate liaison(s) to the Section Net.
- B. DEC's: Ensure that a district net is able to operate in support of counties. If no district net is in operation, advise county ECs to go straight to the Section Net while the District net is developed. Advise SEC if you want Section assistance in creating the District net.
- C. An Introduction to Buckeye Net operations is available as a slide deck online at [https://docs.google.com/presentation/d/1Mn2S9ovXafryS\\_KW3F8nEeRfMYSWddcvbK2b575FGx8/edit?usp=sharing](https://docs.google.com/presentation/d/1Mn2S9ovXafryS_KW3F8nEeRfMYSWddcvbK2b575FGx8/edit?usp=sharing)
- D. Signal Operating Instructions, fldigi Macro Set, and training materials are also available at [buckeyenetweb.wordpress.com](http://buckeyenetweb.wordpress.com).
- E. Message format will be amateur radiogram.
  1. NBEMS (flmsg) may be used for the construction and management of the message but not required. If flmsg is used, hit the [ck] button to format the text and calculate the number of groups in the text.
  2. Precedence is ROUTINE.
  3. Handling Instructions are B48.
  4. Use the Time Filed and Date to reflect when the message will be brought to the first net for relay.
  5. Direct the report radiogram to KD8TTE BEXLEY OH 43209.

6. In the signature, put callsign and ARES position,  
e.g., N8PVC FRANKLIN CO EC,  
KB8YMN DISTRICT 7 DEC,  
KD8TTE OHIO ASEC, or  
N8BHL OHIO SEC.

F. Project traffic may move over any viable RF channel. EC to  
ASEC traffic will be over any NTS affiliate net in Ohio.

VI. Example Messages. These examples demonstrate how each of these  
messages will be sent. In all cases, the format is amateur  
radiogram. Note that in all cases Precedence is Routine, handling  
instructions (HX) are B48,

A. ASEC to DEC.

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NR 601 R HXB48 KD8TTE 16 BEXLEY OH 2300Z JUN 18
KB8YMN DISTRICT 7 DEC
BT
REPORT TO KD8TTE BEXLEY OH
43209 LOCATION IN EACH COUNTY
PRONE TO FLOODING BY JUNE
24
BT
KD8TTE OHIO ASEC
AR
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B. DEC to EC.

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NR 622 R HXB48 KB8YMN 16 COLUMBUS OH 2315Z JUN 18
N8PVC FRANKLIN CO EC
BT
REPORT TO KD8TTE BEXLEY OH
43209 LOCATION IN FRANKLIN COUNTY
PRONE TO FLOODING BY JUNE
24
BT
KB8YMN DISTRICT 7 DEC
AR
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C. EC Replies as Directed.

NR 32 R HXB48 N8PVC 4 REYNOLDSBURG OH 1400Z JUN 20  
KD8TTE  
BEXLEY OH 43209  
BT  
FRANKLINTON PRONE TO FLOODING  
BT  
N8PVC FRANKLIN CO EC  
AR

D. ASEC to SEC.

NR 3958 R HXB48 KD8TTE 17 BEXLEY OH 0100Z JUN 25  
N8BHL OHIO SEC  
BT  
FLOODING INFORMATION REPORTS IN FROM  
ALL DISTRICTS X MISSING COUNTIES  
BRAVO ECHO HOTEL MIKE PAPA  
QUEBEC TANGO  
BT  
KD8TTE OHIO ASEC  
AR