From: Steve Waterman

Subject: **UPCOMING FEMA MULTI_REGIONAL COMMUNICATIONS EXERCISE, JULY 9, 2025**
Date: July 4, 2025 at 10:10:32 AM CDT

All,

We have been invited to participate in a FEMA Multi-Regional Communications Exercise, JULY 9, 2025. Unlike most exercises, this exercise does *not* give us the leisure of planning ahead with time for much detail. However, this exercise provides a realistic timeframe for such an event. In most "real-life" emergencies, we do not get the luxury of developing a detailed exercise specific plan.

In addition to SHARES Winlink, which will provide agency to agency communications, this is also a wonderful opportunity for Winlink on amateur radio to show that situational awareness "ground truth," can be readily obtained within an approximate 1,000 mile radius from the earthquake Memphis, TN epicenter. Such information is especially critical to those who must prioritize response and recovery resources. Please take the time to participate by filling out the Winlink provided *Field Situational Awareness Report* form from the Winlink Express Template library, and send it in via telnet or radio per instructions found in below.

This is a multi-Regional FEMA RECCWG driven exercise, which covers many communications systems including:
The Winlink Hybrid Radio Email Network System for both CISA SHARES and Amateur Radio. In this exercise, we are to provide a situational awareness report based on the information contained in the scenario, which greatly depends on our location.

Just FYI, in addition to the Winlink portion of this FEMA multi-Regional communications exercise are the additional communications components that are proposed for testing:
- The FEMA National Radio System (FNARS): a nationwide, high-frequency (HF) radio network used by FEMA for backup communications during emergencies,
- Starlink, MSAT, G2 SatComm, Iridium SatPhone (involved states)
- Linking of Statewide P-25 Public Safety Trunking Systems between involved states.
- The National Warning System (NAWAS), an automated telephone system used to convey warnings for federal, state and local governments, for military and civilian population.

Below is the scenario for this exercise, which starts on Wednesday, July 9 from 6:30 AM CDT or 7:30 AM EDT (1130 UTC) and ends at 6:00 PM CDT or 7:00 PM EDT (2300 UTC). For those even vaguely familiar with the Winlink system, and specifically Winlink Express, this exercise should be simple to complete with the amount of time we have available to report.

The Task for Winlink is directed and simple:
Below is the starting scenario for this July 9, 2025, EARTHQUAKE exercise.

This exercise should involve participants from zero to approximately 1,000 miles away from the Memphis, TN epicenter. However, if you are further away, you may also experience Internet,

cell, VOIP, POTS, or other communications outages due to the number of fiber and long-line circuits that travel through the earthquake epicenter.

Background:

IMPORTANT: For the Winlink portion of this Exercise, there are (at least) two services participating: The CISA SHARES Winlink participant agencies and their volunteer resources, and amateur radio Winlink participants. Because of the *interoperability* between services available within the Winlink system, both CISA SHARES and amateur radio participants may *both* send email to the same addresses as long as each follows the rules and regulations set forth by the government for each group. SHARES users, using SHARES station callsigns will participate only on the SHARES provided channels (or Telnet), while amateur radio participants will participate on their FCC Part 97 spectrum (or Telnet), following their specific rules and regulations. ***Both groups may send the SITREP "ground truth" information either by TELNET or radio to the two SHARES call signs set up to receive the information (NCS398; NCS800).*** FYI, although there are other Winlink options for delivery, in this exercise they do this through our virtual Common Message Server (CMS) system, located on the Amazon AWS "cloud" by logging into a Radio Message Server (RMS) or via Telnet.

NOTE: For those participants who find that the provided information allows the use of Internet, which is determined by your location's distance from the Memphis 7.8 magnitude earthquake epicenter, please consider using Winlink TELNET instead of your radio in order to alleviate congestion of useable spectrum for those who may not have Internet availability. Even those who may not be conveniently next to their radio equipment may also use Telnet if you wish.

For the this exercise, further distribution of this information to those copied as leaders within their span of control is a part of the exercise. Please expand this information to whatever resources you have available.

Resulting data from the Winlink Field Situation Report will be accumulated as geographic "ground truth" and shown to the appropriate state and federal leadership as a spreadsheet item as both graphic and textual analysis. In addition, a FORM 309 log of all Winlink participants, and a CSV file for GIS viewing will be available.

EXERCISE SCENERIO:

(Exercise, Exercise, Exercise) On Sunday, July 6, 2025, an initial 4.1 magnitude earthquake, centered in Memphis, TN, will occur, and be announced via all news media. *The announcement below requires no action. We will only use this information to prepare for any communications requirements needed based on our own personal outages, and for whatever agencies we work with require per their PACE plan.* However, this exercise will also serve as a warning for future near-term readiness needing alternate, resilient communications resources, which could (and should) be in most emergency agency's communications PACE Plan.

***Pre-Exercise* insert from FEMA:**

Exercise Exercise Exercise

July 6, 2025 -This is a breaking news update from KTSB News at 10:15. We're following reports of a minor earthquake that shook parts of the Mid-South this morning. According to the U.S. Geological Survey, a **magnitude 4.1** earthquake struck near Memphis, Tennessee at approximately 10:00 AM

Central Time. Residents across Shelby County and surrounding areas reported feeling the tremor — a quick jolt followed by a light rumble lasting just a few seconds."

There are no immediate reports of injuries or damage, but the quake was enough to prompt emergency managers to review their earthquake response plans and check for any infrastructure issues."

"Officials remind residents that while this quake was relatively minor, the region lies within the New Madrid Seismic Zone, and preparedness is key. If you felt the quake, you can report it to the USGS 'Did You Feel It?' website to help scientists gather data."

"Stay with KTBS for any further updates. And remember — know your safe spots, drop, cover, and hold on if another quake occurs."

Exercise Exercise Exercise

Exercise insert from FEMA, July 9 at 3:30 am EDT:

At 3:30 AM EDT on July 9, 2025, a 7.8 magnitude Earthquake with its epicenter near Memphis, TN, follows the July 6, 4.1 quake, causing an epic amount of damage. (see PDF Attachment to this email.) Emergency federal, state and local agencies have deployed their alternate communications options where possible in order to maintain communications. In order for all levels of government to respond as quickly and efficiently as possible, there is a push to use available alternate means of communications to obtain as much situational awareness "ground truth" as quickly as possible.

FEMA has requested that all providers/users of resilient communications services (satellite, FNARS, MERS, OpSecure, SHARES HF voice services, and **SHARES and amateur radio Winlink**) report to them as soon as possible to start response and recovery. A critical need for situational awareness at various distances from the Memphis epicenter will allow more effective and efficient use of the limited resources necessary for response and recovery from this mass casualty event.

Message to send: Winlink standard template, Field Situation Report

Specific Instructions for Winlink participation

Below are the instructions for participants:
- **DATE and TIME of Exercise participation:** Wednesday, July 9 from 6:30 AM CDT or 7:30 AM EDT (1130 UTC) and ends at 6:00 PM CDT or 7:00 PM EDT (2300 UTC).
- **Please, feel free to use telnet** from any area. If possible, use radio within the first two most severe impact areas, but if you only have telnet, use it. Telnet should be used where possible to ***alleviate*** the limited amount of provided band space available for those who have no telnet available. **PLEASE, DO NOT INCLUDE AN ACKNOWLEDGEMENT REQUEST, EITHER MANUALLY OR AUTOMATICALLY.** Considering the volume of participation and the limitations on available operating bandspace, it will take up too much space/time for a one-way transmitted report.

How to fill out the Field Situation Report:

1. Open Winlink Express (ensure you have a most recent version, ie.. 1.7.24.0 or higher, Template Version 1.1.13.0 or higher).

2. Open **"New Message"** form. (First ICON in main menu).

3. On New Message Form, click on the **"Select Template"** menu item.

4. Double click on **"Standard Templates"**

5. Choose **"Mapping GIS forms."**

6. Choose **"Field Situation Report.txt"**

7. Your browser should open with the HTML Form showing.

8. Fill out the form per info below:

a. PRECEDENCE (R) **Routine**

b. Date, Time, Task as 1.0.

c. **To: NCS800; NCS398** (separate addresses with semi-colon).

d. On Form:

#1: **NO**.

#2. **your City, County, State** (2 letter designator), or **Territory.**

#3 **Put in Coordinates using degree decimal format, DD.DDDD** . Example: LAT: 36.0703 LON: **-**86.8241, which is the correct format. (Note: LON is a "-" or negative number.)* To convert from degrees, minutes, seconds to decimal degrees use ChatGPT, or the web tool at https://www.fcc.gov/media/radio/dms-decimal. Remember that Western hemisphere longitude is a **negative number**!

(If you cannot provide coordinates per above, then put in your Grid Square, and they will be approximated from your Winlink Express settings.

#4 ***Put in your Grid Square.*** To convert your street address to a grid square, use the web tool https://www.levinecentral.com/ham/grid_square.php.

9. At **this** point, you should review the data in the PDF attachment to this email, which contains probable damage in mileage bands from zero to 800 miles.

10. From the data provided, determine your approximate distance ("as the crow flies") from Memphis, TN, the location of the earthquake epicenter. Once you have approximated that distance, review the mileage band that applies to you and your location, *note the probable effects on physical structures and communications availability, and fill out the SITREP report, accordingly.* ***REMEMBER TO PUT "EXERCISE, EXERCISE, EXERCISE" in the COMMENTS section at bottom of the Form.***

NOTE: If you live 300 miles or less from Memphis, and are powered by a nuclear power plant, which will be mandatorily shut down for inspection for damage, the inspection process takes at least 1-5 days to complete and restore providing power. This, of course, assumes that no damage occurred. NRC regulations (e.g., 10 CFR Part 100 and RG 1.165) require that plants be designed for Safe Shutdown Earthquake Ground Motion (SSEGM). *For a 7.8 magnitude Earthquake, a distance of 300 miles or less from the epicenter would most likely shut down for inspection from 1-5 days. Use your own judgement based on this data.*

11. Once the form is completed, submit it (bottom of report area), and close the browser if it does not happen automatically. Your message will appear.

12. BE CERTAIN to ensure your messages are being sent to NCS800 and NCS398, then find menu item on message form, "POST to OUTBOX," and send the message via TELNET or radio.*

Reminder: If you are not in an affected area, you may decide to use Telnet Winlink. In a "real life situation," you would always want to use Telnet if it is available in order to leave the precious RF spectrum for those in affected areas who have no other choice. However, for this exercise, it is your choice since this exercise is also for practicing your ability to use Winlink in an emergency condition.

Thanks much,

Steve Waterman,
Winlink Administrator
FEMA R4 RECCWG AuxComm Committee, Chair

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