EmComm Training Organization

Nationwide
Communications
Semi-Annual Drill
May 13th, 2023

Scenario and Guidelines

Exercise "Rogue AI"

EmComm Training Team

EmComm-Training.org

05-13-23 Semi-Annual Drill
Final Version 1.6

EmComm Training Organization

ETO Training Exercises and Drills

Some reminders, especially for new arrivals to ETO:

- Read and Follow the Instructions **CAREFULLY**.

- Make sure you address the correct Clearinghouse for your home geographic location (especially if you're temporarily in a different region).

    - Our Tactical Addresses are all formatted as "ETO-nn", where nn is *always* either a 2-digit number ("01", "03", …, "10") or "CAN" for Canadian participants or "DX" for all others.
    - Make sure you type a ZERO, not the letter "O", in the 2-digit number.
    - If you don't know your Clearinghouse's Tactical Address, Use this web page to look it up: https://emcomm-training.org/More_Info.html#Maps

- Another suggestion: put your own "normal" Email Address in the CC box, so that you receive a copy in your non-Winlink Email, as another confirmation that your Winlink message was sent out correctly.

- IMPORTANT! Always restart Winlink Express to ensure you have the current version, and the latest Template updates. The Winlink Development Team (WDT) is constantly updating both.

- ETO exercises are designed to be completed using the Winlink Express client, in a Windows environment. If you choose to use any other Winlink Client Program, "your mileage may vary," and your response may not be mapped or graded as Correct.

- Avoid common errors as outlined on our website:

    https://emcomm-training.org/Winlink_Thursdays.html

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Re-organizational Statement

In recent months, the EmComm Training Organization (ETO) has gone through a major reorganization in order to provide a better training experience for its members and its partners. As with all organizational efforts, there will be challenges along the way. We hope that all of our participants will benefit from these efforts. As we are starting our Nationwide Semi-Annual Drills afresh along with our renewed Winlink Thursday exercises, we felt it was prudent to begin with a simplified drill in order to build back to more sophisticated drills in the coming months and years.

EmComm Training Organization Note

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Purpose

The purpose of the Nationwide ETO (EmComm Training Organization) semi-annual communications drill is to demonstrate the ability of Amateur Radio to provide accurate and timely messaging by forms using email over radio (Winlink) to further the mission of EmComm related agencies and organizations. This can also involve several groups along with many other government agencies and non-government organizations. As accuracy and reproducible documents are a cornerstone of modern disaster communications, the primary emphasis will be on digital written forms of communications, as opposed to verbal.

Objectives

- Amateur radio stations, in an imaginary disaster scenario where the conventional infrastructure is compromised, will compose and send forms/emails over the Winlink "email over radio" system to ETO clearinghouses using an ICS-213 form
- Familiarization of the ICS-213 form and its new location header feature
- To accurately answer questions on a form in a concise way
- Continue to emphasize digital modes for achieving accuracy and timeliness of messaging
- Encourage partner organizations to participate in their own local operations during the drill
- Prepare and train amateur radio operators to effectively use the Winlink system
- Determine weaknesses that future training can address

Semi-annual drill scenario

<p align="center" style="color:red">THIS IS A DRILL</p>

During the early morning of May 12th, a series of cascading electrical and communications infrastructure failures began occurring throughout the US and Canada. At first, these incidents appeared to be isolated to HI and the US west coast. As the morning progressed, failures began to expand into western Canada and into the central US. These early failures involved internet and cellular communications infrastructure. The US National Security Council, FBI and CISA met in early session to try to determine why these incidents were occurring. Early suspicions quickly began focusing on a potential cyber attack on North America.

As the situation worsened, several Governors in the western and central US began declaring states of emergency as reports that critical water and power infrastructure had also begun to experience issues in these same affected areas. By early evening on May 12th, impacts had already spread across much of the US, Canada and Mexico along with reports of sporadic incidents in western Europe. CISA and US Cyber Command have determined that a Pro-Russian hackers group has apparently been using a rogue Artificial Intelligence (AI) to help create a multifaceted attack on western interests. So far, the AI has allowed the group to remain two steps ahead of government agencies in trying to respond to this situation. This has seemed to confirm the fears of many that some kind of AI could be used against the principles for which it was created. Early indications are that this does not involve any of the AI systems publicly known, but rather a "Rogue AI" that may have been funded by western adversary governments.

By the early morning of May 13th, at least 65% of North American internet and cellular coverage was inoperative along with 42% of power infrastructure. The US, Canada and Mexico have declared national states of emergency. Many of the internet based communications systems have been degraded, but many are still functional even if at a low level.

Many state Emergency Management agencies have requested a report on how well Amateur Radio systems have fared, especially digital modes and those that work alongside internet systems. Indeed, governments are asking about how well amateur radio is doing in general in case it is needed on a much larger basis. Although government officials believe that they may get a handle on this relatively quickly, the use of an AI could make this extremely difficult.

The Emcomm Training Organization (ETO) has decided to check on the current EmComm readiness of its participants. We are asking ETO participants to send an ICS 213 message form describing the Emcomm environments at their locations. This will give us a clearer picture of the current status throughout the areas in which our participants reside.

Drill Assumptions

For the purpose of this drill, it will be assumed that power, internet, and phone services are very sporadic throughout the US. In some areas, they may be operable and in others, they may not be functioning.

Drill components and timeline

The ETO semi-annual drill will feature one primary component. This will be the sending of a Winlink Message via a traditional RMS station. This can be done using HF or a VHF/UHF Winlink RMS gateway. This will be required for successful credit on the drill.

The Emcomm Direct Messaging (EDM) organization (a separate organization from ETO) will be offering a companion exercise using similar ETO drill components in the sending of the messages by HF Winlink Peer to Peer.

The timeline for the RMS portion of this drill will have messages starting:

 Saturday 13th, 2023, 00:00 UTC
Messages must be received by Monday, May 15, 2023, 06:59 UTC

The timeline for P2P (Peer to Peer) operation will be outlined in the P2P section of the document courtesy of the Emcomm Direct Messaging group.

Messaging activities using Winlink RMS stations

Messaging Activity Overview

The main goal of the messaging activity of the ETO part of this drill is to send a single ***message,*** with an embedded form through a Winlink RMS station by HF or VHF/UHF to your ETO regional clearinghouse. This drill will not be a tutorial as we normally practice during the regular ETO exercises. You will demonstrate the skills you have learned from the previous Winlink Thursday exercises .

NOTE: If your message is transferring very slowly, find a Winlink RMS Station in a better location for you. Band conditions and propagation have a huge impact on message transfer speed.

Drill Message Requirements for the message

The ICS-213 form will be used for this drill

The form to be used in this drill will be the standard ICS-213 message form in Winlink Express.

The form header will be entered exactly as shown in the filled out example form (below). It should read: EmComm Training Organization 0513 THIS IS A DRILL

Box 1 will be Rogue AI

Box 2 will be John Smith COML

Box 3 will be Your name and call

Box 4 will be Amateur Radio Questions

Box 5 and 6 should show time and date as of message creation

Box 8 will be Your Name followed by Your Call

ICS-213 form and question answers

You will be sending the ICS-213 form with answers to the several questions that will be posed below.

You will put only the answers to the questions in the form and not the questions themselves. Each answer will be on a separate line alone *without the numeral precedent*.

ICS-213 Questions – Enter answers in "7. Message" box

Line   Question

1. Give the call signs (separated by commas) of the VHF/UHF RMS stations you can reach (no more than three),
2. Give the call signs of the nearest 2 meter voice repeater can you reach? Give call sign only,
3. If you are using HF Winlink, list up to three RMS station call signs (separated by commas) that you can normally reach,
4. List which mode you will be using on Winlink such as Pactor, Packet or VARA,
5. Do you have operational DMR, Fusion, or Dstar repeaters within your area? (Yes/No only)

Your answers will **NOT** have the line numbers as shown above.

Fig 1. ICS 213

Setup   Click to add an agency or group name

General Message (ICS 213)	
EmComm Training Organization 0513 THIS IS A DRILL	
Load ICS213 INITIAL Data	Form Instructions

1. Incident Name: **Rogue AI**

2. To (Name/Position): **John Smith COML**

3. From (Name/Position): **Your Name and Call Sign**

4. Subject: **Amateur Radio Questions**	5. Date: _**Current Date**_	6. Time: **Current Time**

7. Message:

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Answer to question 1
Answer to question 2
Answer to question 3
Answer to question 4
Answer to question 5

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8. Approved by: **Your Name**	Position / Title: **Your Call**

Save ICS213 INITIAL Data Submit Reset Form	Ver 41.12

Semi-annual Drill responses and grading

Required responses and grading criteria

1) General Message (ISC 213) (MUST be included)

    a) Header MUST be entered EXACTLY as shown

    b) All form boxes must be populated

    c) All 5 question responses must be included and each one must be on a separate line with no numerical precedent.

ETO semi-annual drill mapping and location

In recent months, the Winlink Development Team has included the ability to have a latitude and longitude location included in forms like the ICS-213 using the headers. Please see the ETO FAQ section (below) for details as this is a relatively new feature.

 Note:

Participants using other software programs other than Winlink Express on a Windows platform may not be able to utilize many of the features in mapping and location being discussed in this drill.

International Amateur Participation

International stations that wish to participate in the drill are welcome to do so by addressing their message to the ETO-DX clearinghouse. We ask that you use the same timeframe as established at the beginning of the document and convert the listed time frame to your time.

Those in Canada can address their messages to ETO-CAN

International stations may also participate in the P2P portion of the drill. Please read the instructions carefully, and be aware of the operating times for the Target Stations (UTC -4, -5, -6, and -7 hours coinciding with Eastern, Central, Mountain, and Pacific US Daylight Time zones).

Partner Organizations Local Exercises

Many times, local partner organizations such as ARES, RACES, and AUXCOMM like to conduct local exercises in conjunction with larger ongoing drills. Local groups should feel free to conduct their localized exercises as they wish. Feel free to use our scenario if desired. Localized exercises will not be connected to our nationwide operation, but we encourage all organizations to take as many training opportunities as possible.

ETO Frequently Asked Questions (FAQ)

1. **What if I am new or have not worked with the form used in this drill?**
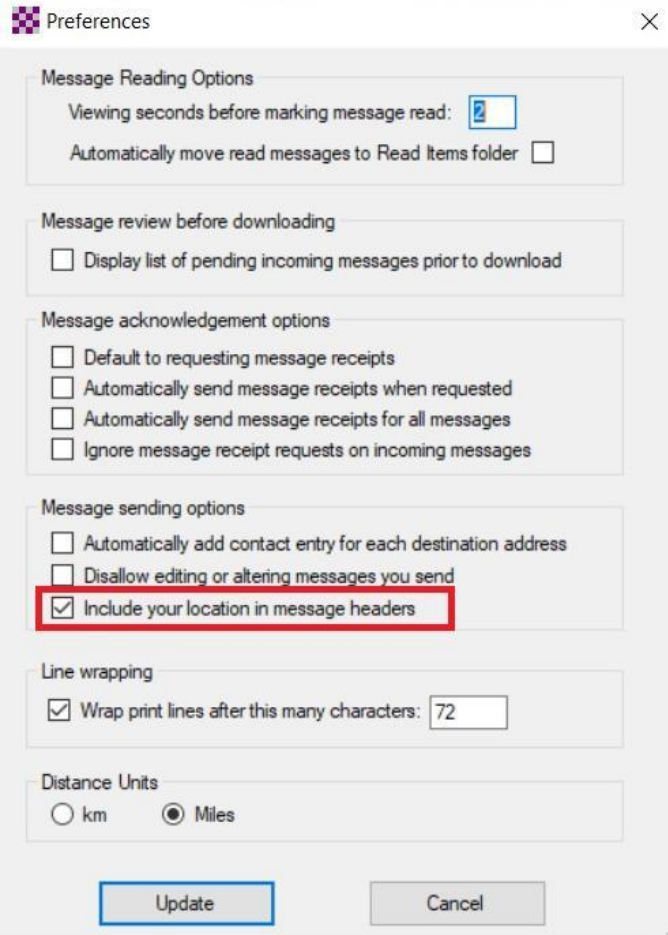
   A: You can look at all of the ETO Winlink Thursday exercises conducted this year on our website www.emcomm-training.org. There you can find the instructions for each one. ETO conducts basic training on an ongoing basis during the calendar year. You will have ample opportunities to participate in exercises almost identical to those you see listed on the webpage.

2. **What if I am connected to an RMS gateway station and my connection is very slow?**

   A: You should consider changing to another gateway station. This can also be on another band, if necessary. This action provides two benefits. This first is that it will help facilitate your message in a timelier manner. It will also free up the original gateway for others that may get a better throughput with that gateway.

3. **How do I use the location feature in headers for the ICS-213 and other messages?**
   A: After saving your setup, go to SETTINGS, then PREFERENCES. Then make sure that INCLUDE YOUR LOCATION IN MESSAGE HEADERS is checked.

The ETO exercise on 0513 will be using coordinates. In order for your latitude and longitude location to be included in the message header if you do *NOT* have a GPS dongle, you need to do the following in *ADDITION* to the previous section above.

You will be sending a position report to Winlink. Go to settings. Then go to GPS/Position reports.

Fill in the Latitude and Longitude boxes manually. This can be done using decimal degree format (e.g. 41.6693 -70.4482). Remember the minus sign for the longitude or the coordinates will end up east instead of west in N America. Remember to **check the box at the bottom before hitting the Post Report Button**. After posting the report, the report will be in your outbox. Just open session and send the report to Winlink. You will get an automated confirmation of reception from Winlink in your inbox.

Note: if you are using an actual GPS dongle plugged in, you can have that data populate the header instead of manually entering coordinates into a position report. Just be sure to set up the dongle (shown at the top portion of the GPS/Position screen shot earlier).

Remember that you must do all of this before you submit your final ICS-213 message to your outbox for sending. If you did it all correctly, you can go to your outbox before sending your actual 213 message and click it on to confirm. You will see the coordinates in a header.

4. **What if I make a mistake on the ICS-213 form, but have already hit submit?**

If you realize that you have made a mistake on your ICS-213 form, but have already hit the submit button, you will need to start over and fill out a new form. **You cannot just edit the message box after hitting submit.**

EDM Peer to Peer (P2P) drill information

As a part of the ETO reorganization, the P2P function has been spun off into a new group, Emcomm Direct Messaging. EDM will concentrate on the technical aspects of P2P messaging when the traditional infrastructure used by normal RMS operations is not available. EDM has created multiple Target Station groups to provide redundancy when needed. If you are interested in participating as an EDM Target Station going forward, simply send a Winlink message to **EDM** for further information.

For this drill, EDM will be using the Bravo Team (see the list on the next page).

Target Stations will operate on 5/13 from 6:00 AM to 6:00 PM local time at their location.

To participate, simply send the same ICS-213 form you created for the ETO portion of the drill to one or more of the Target Stations on the list (you may send to as many as you wish). Propagation may limit which stations you can reach at any given time of day.

Note that this is a drill, NOT a teaching exercise. You should know how to send P2P messages in Winlink Express in order to participate. Go back and review earlier exercises if you are not sure how to proceed.

Remember that each message needs to be converted to P2P mode and addressed specifically to only one Target Station at a time. Do not request an ACK from a Target Station unless you plan to stay on frequency until the Target Station is free to send it.

Also, remember that all P2P transmissions must use Vara HF P2P in **500 Hz mode.**

Video tutorials are available at: **https://tinyurl.com/EDM-ETO-Tutorials**

Thank you, and good luck!

the EDM Team

EDM Target Station List Frequency and Location - 2023 (v 1.06)

Mode/Bandwidth: Vara HF 500 Hz

Bravo Team

Channel	Center Freq. (KHz)	Dial Freq. (KHz)	FEMA Region	Station	Location
01	3581.500	3580.000	01	Reserved for future use	
02	3583.500	3582.000	02	Reserved for future use	
03	3585.500	3584.000	03	Reserved for future use	
04	3587.500	3586.000	04	Reserved for future use	
05	3589.500	3588.000	05	Reserved for future use	
06	3591.500	3590.000	03	W4FLX	Rocky Mount, VA
07	3593.500	3592.000	04	KD2LQA	Chesterfield, SC
08	3595.500	3594.000	05	KC9FXE	Menomonie, WI
09	3597.500	3596.000	09	N6CVO	Acton, CA
10	3599.500	3598.000	10	AG7ZW	Vancouver, WA
11	7071.500	7070.000	04	KE4ROC	Huntsville, AL
12	7073.500	7072.000	05	W8RDG	Manistee, MI
13	7077.500	7076.000	06	K5KYR	Spring Branch, TX
14	7081.500	7080.000	09	AJ6MJ	Thousand Oaks, CA
15	7083.500	7082.000	10	WB7ML	Roberts, ID
16	10131.500	10130.000	02	W2SKY	Penfield, NY
17	10133.500	10132.000	04	KD4IMA	Panama City, FL
18	10135.500	10134.000	06	K4SPB	Fort Worth, TX
19	10143.500	10142.000	09	AG6AG	Newberry Park, CA
20	10145.500	10144.000	10	AE7LM	Hailey, ID
21	14085.500	14084.000	CANADA	VE3RXH	Kemptville, ON
22	14087.500	14086.000	02	KA2R	Lagrangeville, NY
23	14089.500	14088.000	04	KY4KS	Fisherville, KY
24	14091.500	14090.000	07	WX0NET	El Dorado, KS
25	14093.500	14092.000	10	W7PLC	Olympia, WA
26	21081.500	21080.000	04	KA4QVH	Cleveland, GA
27	21083.500	21082.000	06	AA5RL	Lakeway, TX
28	21085.500	21084.000	07	AE0NR	Omaha, NE
29	21087.500	21086.000	09	KF6HI	Phoenix, AZ
30	21089.500	21088.000	10	AC6DF	Lacey, WA
Hawaii, Puerto Rico, US Virgin Islands					
31	7119.500	7118.000	09	AH6T	Honolulu, HI
32	7123.500	7122.000	02	NP4JN	Cayey, PR
34	21121.500	21120.000	09		(unassigned)
35	21123.500	21122.000	02	NP4JJ	Moca, PR

Compliant with ARRL, CONOP, FCC and IARU (Region 2) Band Plans as of Jan. 20, 2022