



Multnomah County 2020 Team Field Drill



March 7th, 2020
0900-1300

Cascadia Slips A Bit

Scenario

On March 3rd, 2020, there was a magnitude 8.1 earthquake off the coast of southern Oregon. While not a “full rip” event, this caused significant damage within Multnomah County. Smaller earthquakes continue to occur almost daily, causing further damage to already weakened buildings and infrastructure.

Many roads and highways are closed or impassable due to damaged bridges. The electrical grid is down, telephone landlines are nonfunctional, cell towers have mostly exhausted their backup batteries and are essentially offline, and there is no internet service at all. Thousands of residents have been displaced from their damaged homes, and have relocated to regional shelters that have been set up by the Red Cross and several county emergency management agencies.

This SET simulates the fourth day of evacuations and shelter deployment. ARES units have been requested to build out regional communications assets to facilitate shelter-to-county communication as well as staff many local shelters with AROs.

Objective

The two main goals of this exercise are to demonstrate ARES ability to execute Winlink communications as teams, and to demonstrate the ability to monitor the Command Net while using a secondary frequency to send and receive Winlink messages. Each ARES team will send local Winlink messages via the Frankengate, or via the digipeater to the FrankenGate, and out-of-area Winlink messages to the VHF to HF winlink relay. We will run a Resource Net and a Command Net. The Resource Net will instruct you to deploy to your team’s assigned shelter location. It is important to monitor the Command Net for the duration of the drill. The 6m voice “Back-Channel” will be available for experimentation.

- Multnomah County ARES team members will activate simulated shelters at the team leader's chosen shelter location(s). Multiple team members in the same shelter location will work as a single unit.
- This drill emphasises Winlink capabilities via radio, but there are voice components as well.
- The FrankenGate (the four-radio Winlink Gateway) will be deployed and configured for local mail pickup (no internet). Teams will be split between different FrankenGate frequencies.
- A digipeater will be deployed for the FrankenGate for stations that cannot reach the gateway directly.
- The VHF to HF Winlink relay will be setup for out-of-area welfare messages.
- The MCARES Communications Trailer will be activated to handle the simplex Command Net.
- The Resource Net will be on the MC2 repeater (which is still up and running on back-up power).
- A 6m FM "backchannel" frequency will be available as an experiment. If you have 6m FM, give a call out to see who else is there. Visitors are welcome.
- Field teams will do a shift change if time allows.

Restrictions

Power is unavailable at the shelter locations.

The MC2 repeater is still operational due to the massive back-up battery at its location. All other local repeaters are non-functional.

Only use the Frankengate Winlink gateway for ICS213 traffic. No telnet or other gateways are allowed. Note that the FrankenGate is operating in Post Office mode for local use only.

Cellular communications have been heavily impacted. Cellular voice is very unreliable, although text messaging works. Landlines are not available.

Cable and DSL based residential and commercial internet service is not operational.

Communications

There will be **no** activation email or text for this drill. Please monitor the Resource Net starting at 09:00 and check in once net control has opened the net. We know you are excited, ***but please do not try to check in early or flood the frequency with signal check requests before the net begins.***

A modified ARES communication operating procedure will be used for this drill:

- Check into the Resource Net with your FCC call sign in ITU phonetics. The Resource Net will remind you of your team's assigned shelter location and then release you to deploy to that location.
- Once on-site, check in with the Resource Net again. You will then be released to the Command Net.
- The first team member on-air at a shelter location should check into the Command Net with your team's "**Tactical call**", which is your shelter location. The Command Net control will give you your team's assigned FrankenGate main frequency.
- **Teams (as a unit) will send Welfare type traffic using non-template Winlink messages, and local traffic using the Winlink ICS 213 template.**
- Teams should use their assigned FrankenGate main frequency if at all possible. If there are issues, then they should try the digipeater. If that fails, they may try an alternate FrankenGate main frequency.

The Command Net is operating on 146.480 simplex.

MC2 **147.280** **167.9** **Resource Net** - using the standard repeater

MC4 **146.480** **no tone** **Command Net** - simplex, located at Rocky Butte

Field teams should use the Delta Team's VHF-to-HF Gateway (NA7EE-10) for all Welfare type traffic.

Simplex **145.530** **no tone** **Welfare Gateway NA7EE-10** - Arbor Lodge Park

Simplex **145.530** **no tone** **Surprise**

Field teams should use their assigned FrankenGate gateway for all local traffic. A digipeater is available on the north side of Mt Tabor if teams cannot reach the gateway via simplex. See Using the Digipeater in Appendix B.

Simplex **145.010** **Frankengate 1 - Gateway KI7QBU-12** - Council Crest

Simplex **147.520** **Frankengate 2 - Gateway KI7QBU-12** - Council Crest

Simplex **446.075** **Frankengate 3 - Gateway KI7QBU-12** - Council Crest

Simplex **431.450** **Frankengate 4 - Gateway KI7QBU-12** - Digipeater use

Simplex **431.450** **Digipeater to Frankengate 4 - KF7YUO-3** - Mt Tabor

Simplex **52.400** **6m FM "backchannel"** between field radio assets

Schedule

- 09:00 Monitor MC2 for the Resource Net to start, and then check into the Resource Net from home, using your FCC call sign in ITU phonetics, and your team name. Resource Net will remind you of your shelter location.
- 09:00-10:00 Deploy to your shelter location. Check **back into the Resource Net**, and you will be transferred to the **Command Net**. Teams send "Welfare type traffic" at any time from their field location using the Delta Team's VHF-to-HF Gateway (NA7EE-10).
- 10:00 **Command net** will broadcast an ICS 213 voice message detailing the requested "Local Winlink ICS 213 traffic". Be prepared to copy the message on a blank ICS 213 form. Be sure to maintain a paper ICS 309 log for all voice traffic. Teams send their ICS 213 messages at any time from their field location. Be sure to poll the FrankenGate periodically (but not too frequently) for a reply.
- 11:00-11:30 Once your team's traffic is sent and you have received a reply to your ICS 213 message, do a 'shift change' using different operators for each position (if possible). Be sure to note the change in your ICS 214 log. If there are not enough operators at a given shelter, that team may omit the shift change.
- 13:00ish After all of your team's traffic is sent and you have received a reply to your ICS 213 message, ask the Command Net for permission to secure. They will direct you to the Resource Net to secure there as well.
- 13:01ish Before breaking down your station, be sure to generate an ICS 309 log within Winlink. Then send the 309 log to your team leader using Winlink, via any available gateway (the internet is back up!). When possible, also scan and send your paper ICS 309 log to your team leader.

Field Team Traffic

Traffic Summary:

At **10:00AM** the **Command Net will send voice traffic** detailing the nature of the “Local Winlink ICS 213 traffic” to send. Operators should respond as a unit (if three operators are at a park - only a single set of messages should be sent from the team, not a set per operator).

For the Welfare type traffic, please be prepared with at least two email addresses to send traffic to.

- For local traffic, use the ICS 213 template, and address it to **K7MOJ**. After sending your ICS 213 message, connect to the gateway occasionally throughout the drill period to pick up any mail that may have been sent to you. You should expect to receive a reply message from **K7MOJ**.
- For Welfare type traffic, please address traffic to normal email addresses (non-Winlink) so the VHF-to-HF gateway will forward it. **Please CC all Welfare type traffic to natehersey@gmail.com**. You will not receive a reply to these messages.
- **NOTE: The gateways and digipeater may be very busy. In an effort to reduce congestion:**
 - **Listen and wait for a clear frequency before connecting.**
 - **Manual connections only, please.**
 - **Avoid attachments.**
 - **Disable delivery confirmation.**
 - **Rough connection? Wait a bit and change something, then try again.**
 - **No Luck? It’s okay, let others have a go.**

Winlink Traffic

Please be sure you have upgraded to the latest version of RMS Express (1.5 or greater). It has the standard templates built into it.

The **Command Net will send voice traffic at 10:00 AM** that will request operators to send an **ICS 213 Winlink template-based message** to the FrankenGate gateway, using the team’s assigned frequency. This type of traffic will be **“Local traffic.”** Local traffic is generally considered to be “county business” that does not leave the region. The FrankenGate gateway is dedicated to this type of traffic.

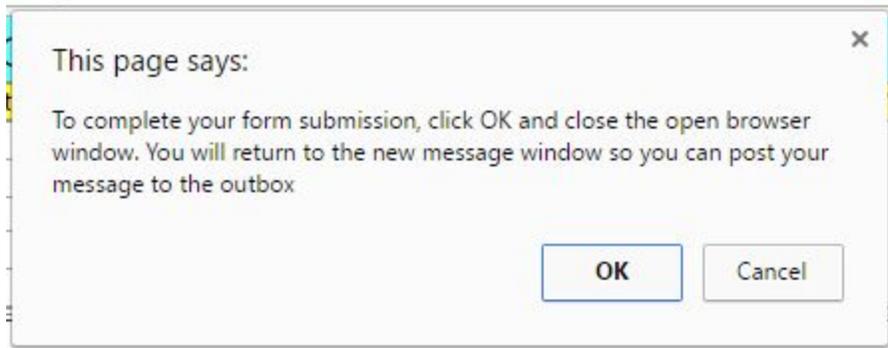
The second type of traffic is called **“Welfare type Traffic”**. In a real incident, Welfare type messages are community-originated and are sent to people outside the region. For this drill, any internet address(s) will suffice, the goal here is to practice relaying winlink via HF. **Each field team will send one non-template Winlink message per shift to any regular email address via the VHF-HF gateway (NA7EE-10) which is operating on the frequency of 145.530. Please CC all Welfare type traffic to natehersey@gmail.com.**

The content of the Welfare type traffic is up to you, and should be simple and short (since we are relaying via HF). e.g: “The Smith family is safe at the Woodland Park shelter.” You could even send this message to your own non-Winlink email address if you choose.

Appendix A - Winlink Templates

Template Use:

1. Open RMS Express and open a new message.
2. In the new message window, choose the "Select Template" menu option and a new window will open.
3. Select "Standard templates"
4. Select "ICS forms USA"
5. Select **ICS 213 Initial**. Fill in the information requested
Note: The date/time will automatically fill in with the current date/time.
6. When you have completed the form, hit the submit button in the lower left corner of the form. You'll get a pop up window telling you it's going to fill in the blank RMS message for you. Press ok.

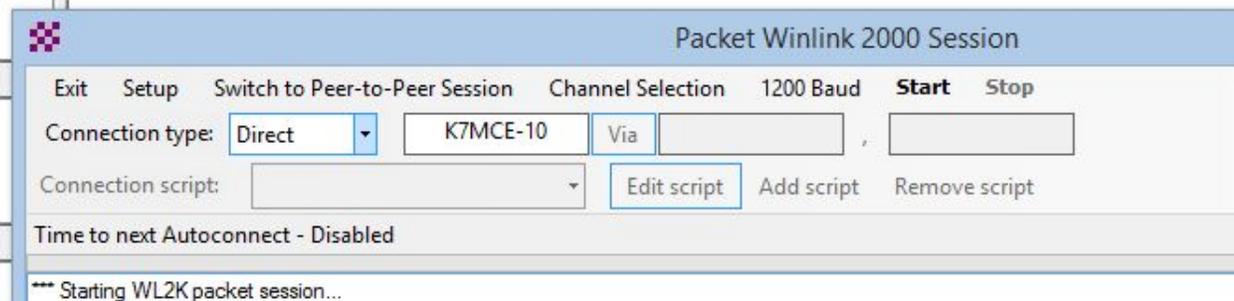


7. Now the RMS Express message you opened in step one should have all the content from the form populated in it.
8. Before you post the form to the Outbox, you need to fill in the receiving station's callsign.
9. Post the message to the outbox and connect to the FrankenGate gateway to drop off your message. The FrankenGate gateway will be in "Local Post Office" mode, which is not connected to the internet, so messages will stay on the gateway until the recipient connects to pick them up.

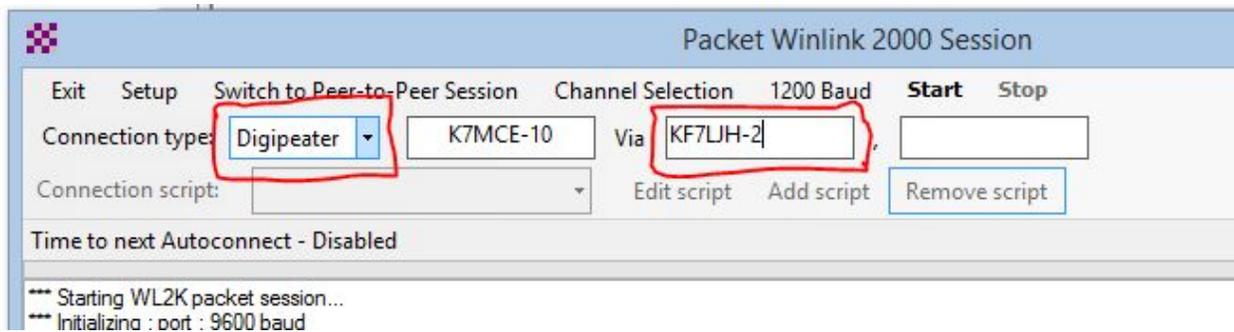
Appendix B - Using the Digipeater

Normally the Winlink Express session screen looks like this when you are making a direct gateway connection..

For example (these are not the callsigns used in this drill):



Making sure you have your radio on the correct frequency, you'd hit send and make the RMS connection. But with a digipeater you'd make the following changes:



Change the connection type to "Digipeater" and for "via" enter the digipeater's callsign.

You've just instructed RMS Express to connect to the K7MCE-10 gateway using KF7LJH-2 as a packet relay station (digipeater). You'll notice that the connection takes twice as long using a digipeater since you are using a relay.

Appendix C - Generating an ICS 309 from within Winlink

1. Open RMS Express.
2. Click on "Message", then click on "Generate ICS-309 Communications Log".
3. In "Select Message Mailboxes", select all mail box checkboxes that have exercise traffic, including any Global folders that you created/used.
4. Select a "Message Date Range" sufficient to cover all message traffic.
5. Fill out the "Task ID" and other fields as appropriate for this drill, and select an "Output pdf file" name that associates it with this drill, in a folder that will be easy for you to find.
6. Click on "Generate ICS-309".

