

# Carrington Event Preparation Drill

## Exercise Message Submission Window

- **Starts: May 7<sup>th</sup>, 2024 00:00 UTC**   **Ends: May 12<sup>th</sup>, 2024 06:59 UTC**

## Difficulty Level: **Advanced**

*This exercise is an advanced level drill. If you choose to send all nine Check-in messages, the drill may take several hours to complete, as opposed to the much lesser time to complete the minimum requirement of the Telnet Check-in. The submission window is longer than that of typical exercises. This allows participants to spread the drill over multiple days and optimize their time for gateway access at their location. Please plan accordingly. For those with limited radio resources, a subset of the 8 radio based zones is also acceptable than just the minimum Telnet Check-In.*

## Purpose:

- Produce a Winlink ICS 309 Form containing the entries of the participant's successful message passing via various bands, session modes, and distances to RMS Gateways.

## Objectives:

- Gain a better understanding of a geomagnetic storm's possible impact on the electrical grid.
- Be aware of NOAA's Space Weather Prediction Center reporting and capabilities.
- Recognize the three independent U.S. managed AC power interconnect systems.
- Send up to nine standard Winlink Check-in messages to the Recipient ETO-DRILL
- At a minimum send one Check-in via TELNET. Depending upon gateway availability, available radio resources, and license restrictions:
  - Send one Check-in form via a UHF frequency using Packet or VARA FM
  - Send one Check-in form via a VHF frequency using Packet or VARA FM
  - Send one Check-in form for each zone range via an HF frequency using Robust Packet, Ardop, Pactor, or VARA HF.
    - Zone ranges.
      - RMS gateway from 1 - 100 miles from your Winlink location.
      - RMS gateway from 101 - 300 miles from your Winlink location value.
      - RMS gateway from 301 - 600 miles from your Winlink location value.
      - RMS gateway from 601 - 1200 miles from your Winlink location value.

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- RMS gateway from 1201 - 2000 miles from Winlink location value.
- RMS gateway greater than 2000 miles from Winlink location value.
- This is an Advanced drill, all activity in the drill has been documented in previous Winlink Thursday Exercises, so the instructions are not wholly inclusive. You may want to refer back to past ETO exercises instructions for greater detail.

**Resources:**

- [NOAA Space Weather Prediction Center](#)
- [Magnetic Storms And the US Power Grid](#)
- General Notes on Frequently-Seen Mistakes:  
[https://emcomm-training.org/Winlink\\_Thursdays.html](https://emcomm-training.org/Winlink_Thursdays.html)
- Finding your ETO clearinghouse:  
<https://emcomm-training.org/General-Drill-Info.html>
- ETO Location Instructions — With or Without a GPS Receiver for your Computer [PDF]
  - <https://emcomm-training.org/Santa-2023/ETO-Location-Notes.pdf>
- How a GIS map-capable form's default position is determined:
  - From within Winlink Express Click on Help ⇒ Help Contents..., expand Operation, click on GIS Mapping Forms & Catalog Items
- [Viewing Sent Messages in the Winlink US Message Viewer](#)

**Background:**

When a Coronal Mass Ejection (CME) encounters the Earth's magnetic field, the magnetic field becomes compressed and can produce a geomagnetic storm. This storm generates fluctuating magnetic fields near the Earth's surface. These fluctuating fields induce a weak electric field, which in turn introduces Geomagnetic Induced Currents (GIC) into long conductors such as power transmission lines. GIC are quasi-DC currents that can reach millions of amps at hundreds of volts.

The Bulk Power System (BPS) employs transformers for voltage control, matching generation plants to the grid and distribution systems. Generation Step-up Units (GSU) Transformers located at the generation facilities are the critical link between the power station and the transmission network, often operating day and night at full load. Similarly, Extra High Voltage (EHV) transformers are situated at EHV substations for automated voltage control. EHV step-down transformers are located at substations that are the interface between the BPS and the Distribution System managed by local utilities. Step-up transformers increase the voltage at the generator level to match the transmission voltage level. Automatic voltage control transformers maintain the voltage

at a constant value, and step-down transformers match the EHV to match the voltages of the local distribution system. These transformers are built to withstand extreme thermal loading, but not thermal stress on their structural members.

With over 180,000 miles of high voltage transmission lines and more than 20 volts induced into a transmission line every 10 miles, transformer cores can quickly reach saturation, where the core can no longer contain the magnetic flux. The flux leakage can flow through structural members and the transformer tank wall. Eddy currents produced by the intense magnetic field can heat ferrous structural members of the transformers just like an inductive stove top.

Transformer failure due to thermal damage can lead to a cascading power grid failure. The secondary effects of core saturation, such as harmonics, reactive power absorption, and voltage stability problems, can cause the voltage control system to disconnect a plant from the grid. If power source disconnects and system problems are widespread, blackouts or even complete collapse of some power grid systems, could occur.

A complete grid failure is a serious event that requires grid operators to restart the grid using designated "black start" generators. Restoring the grid requires complicated balancing to avoid mismatches between energy generation, transmission systems, and consumption. If this balancing is not performed correctly, the power grid system can collapse again. Replacing failed EHV transformers is a major undertaking that may require a long lead time for design, engineering, and manufacturing, unless a spare transformer is available nearby. Unless it is a multiple unit power plant, the EHV may be the only one onsite.

A CME does not threaten small electronics lacking the long conductors that characterize the grid. Most Ham Radio systems, disconnected from the power supply and antenna connection, should survive a high level CME event as well as most disconnected Ham Radio backup power solutions.

NOAA Classifications of Geomagnetic Storms Impact on the Electrical Grid:

- *Minor*, classified as a *G1*. Power systems: Weak power grid fluctuations can occur.
- *Moderate*, classified as a *G2*. Power systems: High-latitude power systems may experience voltage alarms, long-duration storms may cause transformer damage.
- *Strong*, classified as a *G3*. Power systems: Voltage corrections may be required, false alarms triggered on some protection devices.
- *Severe*, classified as a *G4*. Power systems: Possible widespread voltage control problems and some protective systems will mistakenly trip out key assets from the grid.
- *Extreme*, classified as a *G5*. Power systems: Widespread voltage control problems and protective system problems can occur, some grid systems may experience complete collapse or blackouts. Transformers may experience damage.

**Scenario:**

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On May 4th, the National Oceanic and Atmospheric Administration's (NOAA) Space Weather Prediction Center reported that observations from the Solar and Heliospheric Observatory's (SOHO) Large Angle and Spectrometric Coronagraph instrument indicated that sunspot region 3753 produced a large X class solar flare as it rotated to the far side of the sun. Measurements are only available from the onset of the event, as the satellite sensors were overwhelmed by side-glancing energetic particles shortly thereafter. The estimated Coronal Mass Ejection (CME) would have produced a G4 level geomagnetic storm had it been Earth-facing. Models utilizing NASA's Solar Dynamics Observatory (SDO) Helioseismic and Magnetic Imager (HMI) data and the Solar Wind Anisotropies (SWAN) instrument indirectly monitor the far side of the sun. These models predict that sunspot region 3753 will not only survive its passage to the far side of the sun, but will likely become more active. Most models indicate that there is a possibility that once it rotates into an Earthward view, it could produce an Earth-facing CME comparable to the 1859 Carrington Event.

For the United States, the National Oceanic and Atmospheric Administration's Space Weather Prediction Center (SWPC) has issued a Geomagnetic Storm Watch due to the potential severity of the storm. SWPC has provided information to the MidWest ISO (MISO), the Electric Reliability Council of Texas (ERCOT), and the Western Electric Coordinating Council (WECC). MISO is designated to receive and disseminate notifications of potential solar storms and resulting geomagnetic disturbance (GMD) to the Reliability Coordinators, Balancing Authorities, and Transmission Operators within the Eastern Interconnect. WECC's Reliability Coordinators in Vancouver, Washington, and Loveland, Colorado are designated to disseminate notifications to other operating entities within their region. Following the requirements from the North American Energy Reliability Council (NERC) rulings, these notifications are disseminated when the critical threshold of the K-Index exceeds 6, 7, and 8.

May 5th: Recognizing they have at a minimum 11 days for the sunspot region to rotate back into Earth's view, BPS operating entities activated their plans for operating strategies for mitigating impact for when a high level GMD event is to occur.

Many mitigation strategies would only be employed once SWPC escalates the situation to an alert level. These strategies could disrupt service to segments of the network, such as shedding load in regions to reduce the reliance on long transmission lines for importing power to balance load demands. Transmission Operators might also shut down their long segments. In accordance with NERC recommendations derived from the analysis of the 1989 Hydro-Quebec GIC event, several transmission asset owners have incorporated GIC withstand requirements into their procurement specifications for new transformers. Regions that have replaced critical components with these newer devices

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may continue operating, albeit at lower voltages or with localized load shedding, to ensure system margins sufficient to withstand GIC-induced impacts.

Regional balancing facilities have requested that Operating Entities stand ready to provide Ham Radio operators to assist in communications if normal communications channels are overloaded or unavailable. This request is in recognition of the extensive communications required to restore a grid after a large-scale cascading network failure. The Emcomm Training Organization (ETO) was tasked with providing a list of the capabilities of participants and their stations in relation to the regions where their stations can provide Winlink connections. Their interests include stations with capabilities for local messaging and those that can relay long-distance messages. The CISA Resilient Power Working Group is responsible for the SHARES spectrum related tests, so all ETO activities are limited to the Amateur Bands. To meet the delivery date of May 13, all ETO participants must submit their information to their ETO Clearinghouse no later than May 12th, 2024, 07:59 UTC.

The continental United States is home to an extensive network of transmission lines operated by over 500 companies. Within the Western Interconnect, the distance between the two Reliability Coordinators is nearly 1000 miles, and their transmission lines cover over 1.8 million square miles. In the Eastern Interconnect, there are eight Transmission Coordinators whose office locations can be separated by over 850 miles, with transmission lines covering over 638,500 square miles. Information exchange between widely dispersed groups, over vast areas, is a significant challenge not only due to the distances involved, but also the number of entities involved.

**Task:**

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To meet the request for communication assistance, ETO has determined that there are nine zones of communications that will demonstrate the level of abilities for each participant. A single internal operational zone will employ Telnet, two local area zones use UHF and VHF, and six zones for HF operations employ increasing distances between the zone boundaries. The more distant zones represent the distances that must be traversed to reach neighboring Interconnects or reliability coordinators. The zones of primary interest are zones identified as UHF, VHF, HF-1, HF-101, HF-301, and HF-601. Radio frequencies will be limited to those within the UHF, VHF and HF Amateur bands.

Each participant is requested to attempt to execute a message transfer of the Winlink Check-in Form for each of the designated zones. The objective is to determine which zones are accessible using any RMS gateway that meets the criteria for that zone. *It is understood that resource constraints may preclude some participants from accessing*

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*gateways in all zones. However, to participate in this exercise, a minimum of one zone must be performed.* The message to be transmitted to each zone will be in the form of the Winlink Check-in form with the recipient being the Tactical Address **ETO-DRILL**. The Winlink Check-in form is created from the “Winlink Check-In.txt” option. To locate it, navigate to the **Standard Templates** section of the **Template Manager** and expand to the **General Forms** line item.

At completion of transmitting all their Winlink Check-In forms to the appropriate zones, the participant is to create a Form-309 Communications Log to their ETO Clearinghouse Tactical Address. The Form-309 must contain the list of messages sent to each zone. Form-309 is created from the “ICS309 Communications log.txt” option. To locate it, navigate to the **Standard Templates** section of the **Template Manager** and expand to the **ICS USA Forms** line item.

The following tables provide the variable content that is utilized for determining zones and completing the Winlink Check-in forms.

	<b>Zone ID</b>	<b>Winlink Session Modes</b>	<b>Zone Range</b>
1	Telnet	Telnet, Mesh	N / A
2	UHF	Packet, Vara FM	Any distance
3	VHF	Packet, Vara FM	Any distance
4	HF-1	Pactor, Ardop, Vara HF, Robust Packet	1 to 100 miles from QTH
5	HF-101	Pactor, Ardop, Vara HF, Robust Packet	101 to 300 miles from QTH
6	HF-301	Pactor, Ardop, Vara HF, Robust Packet	301 to 600 miles from QTH
7	HF-601	Pactor, Ardop, Vara HF, Robust Packet	601 to 1200 miles from QTH
8	HF-1201	Pactor, Ardop, Vara HF, Robust Packet	1201 to 2000 miles from QTH
9	HF-2001	Pactor, Ardop, Vara HF, Robust Packet	2001 plus miles from QTH
<b>Table 1: Boundaries</b>			

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	Zone ID	Type	Service	Band	Session
1	Telnet	EXERCISE	AMATEUR	Telnet	Telnet
2	UHF	EXERCISE	AMATEUR	UHF	Packet or VARA FM
3	VHF	EXERCISE	AMATEUR	VHF	Packet or VARA FM
4	HF-1	EXERCISE	AMATEUR	HF	Pactor, Ardop, Vara HF, or Robust Packet
5	HF-101	EXERCISE	AMATEUR	HF	Pactor, Ardop, Vara HF, or Robust Packet
6	HF-301	EXERCISE	AMATEUR	HF	Pactor, Ardop, Vara HF, or Robust Packet
7	HF-601	EXERCISE	AMATEUR	HF	Pactor, Ardop, Vara HF, or Robust Packet
8	HF-1201	EXERCISE	AMATEUR	HF	Pactor, Ardop, Vara HF, or Robust Packet
9	HF-2001	EXERCISE	AMATEUR	HF	Pactor, Ardop, Vara HF, or Robust Packet
<b>Table 2: Winlink Check-in Message Session Info</b>					

	Zone ID	COMMENTS	Subject*
1	Telnet	Telnet	ETO 2024 Spring Drill - Telnet
2	UHF	UHF	ETO 2024 Spring Drill - UHF
3	VHF	VHF	ETO 2024 Spring Drill - VHF
4	HF-1	HF-1	ETO 2024 Spring Drill - HF-1
5	HF-101	HF-101	ETO 2024 Spring Drill - HF-101
6	HF-301	HF-301	ETO 2024 Spring Drill - HF-301
7	HF-601	HF-601	ETO 2024 Spring Drill - HF-601
8	HF-1201	HF-1201	ETO 2024 Spring Drill - HF-1201
9	HF-2001	HF-2001	ETO 2024 Spring Drill - HF-2001
<b>Table 3: Winlink Check-In Message COMMENTS and Subject Line</b>			

\* **Important:** The Winlink Check-in form generates the Subject line and displays a pop-up dialog box to edit the Subject when the Submit button is clicked. The provided Subject line must be replaced with the Subject text associated with the Zone ID in the table.

## Exercise Instructions:

The submission window for the drill is five days, which for most participants will include four weekdays, four nights, and a Saturday. This timeframe allows for planning the use of optimal propagation of day or night conditions to maximize the number of successful attempts for the zones. The Telnet Zone is the only zone that is required to be sent. There is no penalty for not providing a Check-In form for any of the other zones. Zones UHF, VHF, HF-1, and HF-2001 may be challenging for many, due to a lack of gateways within the zone or skip distances related to antenna configuration or propagation conditions.

### Section 1. Initialize Winlink Express

1. Open or restart the Winlink Express application.
2. Allow any updates to occur if prompted to do so.
3. Note:
  - The instructions assume you will generate a message for a specific zone and then transmit that single message to that zone. You iterate through this process until all reasonably possible messages are transmitted.
  - Alternatively, you may generate all your messages and assign each one to a specific zone. You can then individually dispatch the messages to their assigned zones. All dates must be within the submission period.
    - i. If you follow this process, after composing a message, click on **Save in Drafts** instead of **Post to Outbox**. This action will prevent the accidental delivery of all messages to a single zone.
  - Send only one Check-In message per zone.
  - Check-in messages do not need to be sent in any Zone ID order.
  - If multiple Form-309's are sent, the last one received will be considered the submission.

### Section 2. Generate a Winlink Check-in Message for a specific zone

1. From Table 1 determine the Zone ID for your message.
2. Create a new Winlink Check-in message.
  - a. The **Winlink Check-in.txt** file is located within the list of templates under the **GENERAL Forms**.



3. Ensure the agency/group name is set to **EmComm Training Organization**
4. In the **STATION** block of the Winlink Check-in:
  - a. Provide a current Date/Time that is within the exercise submission window.
  - b. The recipient should be *ETO-DRILL*.
    - i. Do not send any Winlink Check-Ins to your ETO Clearinghouse or to ETO-BK.
  - c. Use your call sign for both the **From:** and the **Initial Operator(s):** fields.
  - d. Provide the first name or nickname for the Station Contact Name.
5. In the **SESSION** block select the options for Type, Service, Band, and Session Columns in Table 2 that correspond to the Zone ID to which this message will be sent.
6. In the **LOCATION** Block:
  - a. Within the **Location** text box provide a non-blank description of the quadrant of your state (e.g. NW Oregon).
  - b. If you don't have an attached GPS that works with Winlink Express:
    - i. Within the **Latitude** text box provide a non-blank approximation of the latitude from which you are sending the message.
    - ii. Within the **Longitude** text box provide a non-blank approximation of the longitude from which you are sending the message.
    - iii. Entering the Latitude and Longitude will populate the MGRS field.
    - iv. Entering the Latitude and Longitude will populate the Grid Square field.
    - v. Note: Right clicking your mouse (or touch pad equivalent) on a location in Google Maps will provide you a latitude and longitude of that location.
7. Determine the COMMENTS and Subject Values corresponding to the Zone ID to which this message will be sent (see Table 3).
  - a. In the **COMMENTS** block, enter the determined COMMENTS value.
  - b. Prior to submission, you may want to click on **Save Check-in Data** for building the messages for other Zone IDs.
8. **Important >>>** *After pressing **Submit**, replace the provided **Subject** with the determined Subject value from Table 3.* <<< **Important**
9. Post Message to the Outbox.

a. NOTE:

- i. If you are composing all your messages in advance rather than sending them immediately after building, it is recommended that you save your messages in the Drafts Folder. If a message has already been posted to the Outbox, you can move it from the Outbox to the Drafts Folder. This practice helps prevent accidental transmission of messages for other zones during a connection with a gateway in another zone. When you send the message you will need to move that message to the Outbox from the Draft folder.

### Section 3. Send Messages

1. Validate that only one message is in the Outbox and note the zone.
2. Within Table 1 note the Zone Range and Session Mode types shown for that zone.
3. Select and Open the Winlink Session type using one of the Session Mode types from Table 1. If an existing session window is open, it will need to be closed when changing session types.
4. Open Channel Selection.
5. Select a gateway that has a distance with the Zone Range noted from Table 1.
  - a. For UHF/VHF, it may be helpful to sort by Frequency.
    - i. UHF: 300 MHz - 3 GHz
    - ii. VHF: 30 MHz - 300 MHz
  - b. For HF, it may be helpful to sort by Distance.
6. If the Channel is not busy click start.
  - a. Pay attention to the waterfall. Many narrow band gateways share frequencies with popular frequencies for other digital modes. The frequency busy alert may not recognize that particular digital mode.
  - b. On the wider modes, you may only be able to hear one side of an active session in progress. Listen long enough to know the frequency is clear.
7. Try a different Channel if a connection didn't work.
8. HINTS:
  - a. In HF the 500 Hz modes are often less busy. Often it can be faster to use a 500 Hz frequency than waiting for a wider band mode to be free.

- b. Propagation Estimates are just that. Often lower level estimates behave well.
- c. On the Winlink.org site there is a Propagation Map of recent connections. *Prop Map* tab at <https://winlink.org/RMSChannels>. This information provides an overview of the gateways that other users have successfully connected to. Please be aware that Winlink.org experiences occasional technical issues. If you encounter an error, simply refresh the page.
- d. To use Auto-Connect to aid in finding a workable gateway within the zone, adjust the Auto-Connect settings as follows:
  - i. The minimum distance to match the zone range lower bound.
  - ii. The minimum Vara bandwidth to: 500.
  - iii. Lowering the minimum path quality may also improve results.

#### Section 4. Repeat For All Planned Zones

1. Repeat the process to generate a Winlink Check-in message for a new specific zone and send the Message.
2. The drill lasts for 5 days, you can try for better conditions later in the submission window or at night. The choice is up to you, no penalties or feedback for not having all 9 zones.

#### Section 5. Populate the COMMUNICATIONS LOG (Form-309)

1. In a new message open the Form-309 form within the Standard Template library.
2. Set the agency/group heading to **EmComm Training Organization**.
3. Values for the following fields.
  - a. *Task #*
    - i. 240511
  - b. *Date/Time Prepared*
    - i. Use a YYYY-MM-DD HH:mm format Date/Time within the submission window.
  - c. *For Operational Period #*
    - i. 05/07-05/11
  - d. *Task Name*

- i. Carrington Event Preparation Drill
  - e. *Operator Name*
    - i. Your First Name
  - f. *Station ID and Express Sender*
    - i. Your Callsign
  - g. *Page #*
    - i. 1
- 4. Communications Line Items
  - a. Provide only the messages sent to ETO-DRILL, with the values in your **Sent Items** list
    - i. Hint: You may want to create a .Personal folder and move the messages sent to ETO-Drill there to keep them separate from other Winlink activity.
  - b. You may either manually enter the information or follow the process to paste data from a generated Tab Delimited file that was described in the March Exercise.
  - c. If generating a Tab Delimited file to cut and paste into the Form-309
    - i. Remember to use the Form-309 date format of YYYY-MM-DD
    - ii. Only select the *Sent* folder (or your Personal folder you moved them to).
    - iii. Within the Select Columns to Include group box, only check the: *Time, From, To, Subject* columns
    - iv. When selecting the range of text from the Tab Delimited File, do not include the header text. Also, ensure that the cursor is positioned past the last line of the selection range. Failure to do so will result in the last line not being parsed because the parser requires the last line's carriage return to read that line.
    - v. From within the Tab Delimited file, edit the file to remove any message line items that are not the Check-in messages associated with this Drill.
- 5. The Form-309 message **MUST BE SENT AFTER** May 7th, 2024 00:00 UTC, but **BEFORE** 05/12/2024 06:59 UTC.
  - a. Set the recipient to your ETO Clearinghouse
  - b. CC the message to ETO-BK

**Verification (optional)**

1. For U.S. participants, a good way to know if your non-telnet messages were

received by the CMS is to search for the message ID on the Winlink.org *US Message Viewer*. Brief instructions follow:

- a. Using your favorite web browser, go to the Winlink.org website and login under the *My Account* tab.
- b. The User ID and Password should be the same credentials you use within your setup of Winlink Express.
- c. After logging in, click on the *US Amateur Radio Message Viewer* link in the left column.
- d. On the page that opens, click on the button that is labeled *Open Viewer in a Separate Window* that is about halfway down the page.
- e. In the drop down box labeled *Filter Type* select the drop down option *MessageID*.
- f. Copy the Message ID from your sent message and paste into the *Search for:* text box.
- g. Click on the *Search* button.
- h. You should see the message if it was received along with the gateway and center frequency.
  - i. If ETO-BK used a radio mode you may also see the message information of how it was retrieved from the CMS.

## End of Exercise Instructions

See the next page for example of a completed Form-309 from this drill that would not receive any feedback related to filling in the form.

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## Example of Completed Form-309 Communications Report For Sent Check-in Messages

<b>COMMUNICATIONS LOG</b> (Form- 309) EmComm Training Organization  <a href="#">Form Info</a>	Task # <input type="text" value="240511"/>	Date/Time Prepared: <input type="text" value="2024-05-10 19:17"/>	
For Operational Period # <input type="text" value="05/07-05/11"/>	Task Name <input type="text" value="Carrington Event Preparation Drill"/>		
Operator Name <input type="text" value="Brian"/>	Station ID <input type="text" value="W7OWO"/>	Express Sender <input type="text" value="W7OWO"/>	
Load Form 309 Data    PAGE # <input type="text" value="1"/> <i>Track &amp; Increment your page #'s (Default is 1)</i> <a href="#">Paste Data from a Spreadsheet</a> <a href="#">CLEAR Data</a>			
DATE/TIME		STATION ID FROM TO	SUBJECT
<input type="text" value="2024-05-07 13:55"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - Telnet"/>
<input type="text" value="2024-05-07 14:22"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - UHF"/>
<input type="text" value="2024-05-08 20:45"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - VHF"/>
<input type="text" value="2024-05-08 21:04"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - HF-1"/>
<input type="text" value="2024-05-09 20:28"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - HF-101"/>
<input type="text" value="2024-05-09 20:52"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - HF-301"/>
<input type="text" value="2024-05-10 09:30"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - HF-601"/>
<input type="text" value="2024-05-10 13:05"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - HF-1201"/>
<input type="text" value="2024-05-10 13:55"/>	<input type="text" value="W7OWO"/>	<input type="text" value="ETO-DRILL"/>	<input type="text" value="ETO 2024 Spring Drill - HF-2001"/>
<input type="text" value="Click for Date/Time"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Click for Date/Time"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Click for Date/Time"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Click for Date/Time"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Click for Date/Time"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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<input type="text" value="Click for Date/Time"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Ver 13.10