

Winlink Training Bulletin #17

The Pinellas ACS Winlink training net is used to familiarize ARES®/ACS participants with Winlink skills and to practice digital network operations. A summary training bulletin is delivered via Winlink to all registered Winlink Training Net participants prior to each scheduled net. A detailed bulletin that includes instructions for performing each scheduled task will also be posted to the Pinellas ACS Web site prior to each net.

1.1 NET DESCRIPTION

The following information is applicable to this week's training net.

- a. Date: **Wednesday** July 20th, 2022
- b. Time: 1930 Hours Local
- c. Duration: 1 Hour
- d. Type: Mixed Mode. Voice traffic will take place on the WD4SCD repeater and digital exchanges will take place via Winlink.
- e. Net Control: WA1RYQ
- f. Support material:
 - (1) Thunderstorm Image file

1.2 NET OBJECTIVES:

The following objectives have been assigned to this week's Winlink Training Net.

- a. Create a Winlink Check-in message and then send the message to all net participants.
- b. Import, resize, and send a photograph to all net participants.
- c. Create a **Local Weather Report** and send the message to all net participants.
- d. Create and post a **GPS/Position** report.
- e. Create a Winlink Check-out message and then send the message to all net participants.

1.3 SESSION NOTES:

The following session notes are applicable to this week's Winlink Training net.

- a. Winlink messages can be sent using any RF protocol or, if the net member does not yet have an RF Winlink capability, via Telnet.
- b. All Winlink Net participants should ensure that they are running the latest version of Winlink, **Version 1.6.6.1** or higher, prior to the net. The corresponding message template version is **1.0.204.0**.
- c. All Winlink RF Net participants should ensure that they are running the latest software versions:
 - (1) VARA FM - Version **4.2.3**
 - (2) VARA HF - Version **4.6.2**
 - (3) UZ7HO - Version **1.14**

1.4 NET ACTIVITIES:

An overview of the planned net activities is documented below.

- a. The NCS will establish the net at 1930 Hours local using the WD4SCD repeater.
- b. The NCS will request check-ins. The NCS will include Echolink in the call for check-ins.
- c. The NCS will field comments and questions about the net's objectives and activities from net participants.
- d. Following the question-and-answer period, the NCS will use a rollcall to direct each station in turn to send a Winlink Check-In message to all net participants.

Note: *The Winlink Check-in and Check-out forms should not be completed before the net begins. Net participants should also ensure that the REQUEST MESSAGE RECEIPT box is checked on all messages.*

- f. After the rollcall is complete, the NCS will request that each net participant import an image file from the PACS website. Users can download the image prior to the net.
- g. After confirming that each net participant has downloaded the image file, the NCS will direct each station to create a **Local Weather Report** message and attach the downloaded image to the report. Users will be directed to resize the image and then send the **Local Weather Report** message to all net participants.
- h. After confirming receipt of the Local Weather Report message, the NCS will direct each station to post a **GPS/Position** report.
- i. The NCS will close the digital segment of the net by using a rollcall to direct each station in turn to send a **Winlink Check Out** message to all Winlink Net participants.
- j. The NCS will field comments and questions from net participants.
- k. Following the question-and-answer period, the NCS will close the net.

END SUMMARY WINLINK BULLETIN

1.5 MESSAGE INFORMATION:

1.5.1 Winlink Check-in Form:

When the net control station is ready to begin taking Winlink Check-ins, the NCS will request that each station create and send a Winlink Check-in message.

- a. Group Name: PACS Winlink Training Net
- b. Date/Time: This value should correspond to the time and date that the message is sent. Therefore, the Check-in message cannot be created ahead of time and stored as a draft.
- c. Status: NET
- d. Band: Enter the appropriate value.
- e. Mode: Enter the appropriate value.

- f. TO: Send completed message to all net participants.
- g. Calls Signs of Initial On-Site Operator(s): Enter your FCC Call sign
- h. Sender: Enter your FCC Call Sign.
- i. Location: Enter a street address for your current location.
- j. LAT, LONG, MGRS, GRID: Enter your current latitude, longitude, MGRS and Maidenhead grid data.
- k. Comments: Description of emergency/back-up power capability.

1.5.2 Winlink Check-Out form:

When the business of the net is complete, the NCS will request that each station create and send a Winlink Check-out message.

- a. Group Name: PACS Winlink Training Net
- b. Date/Time Station Secured: This value should correspond to the time and date that the message is sent. Therefore, the Check-out message cannot be created ahead of time and stored as a draft.
- c. Status: NET
- d. TO: Send completed message to all net participants.
- e. Calls Signs of Closing Operator(s): Enter your FCC Call sign
- f. Sender: Enter your FCC Call Sign.
- g. Location: Enter a street address for your current location.
- h. LAT, LONG, MGRS, GRID: Enter your current latitude, longitude, MGRS and Maidenhead grid data.
- i. Comments: Version of Winlink Express and Winlink Templates.

1.6 PHOTOGRAPH

During a deployment, the operator and/or the served agency may be required to send an image to a Winlink destination. The image may show storm damage or other relevant information. For this exercise, assume you are operating from home and the EOC has requested pictures of an approaching Thunderstorm.

1.6.1 Attach and Resize Image

Create a **Local Weather Report** message and attach the image file, *Thunderstorm.jpg*, to the message. The image file can be downloaded from the PACS website using the following link: <https://www.pcaps.org/training/digital-training/winlink-training-net/>. Once the file is attached to the message, it will need to be resized before it can be sent via Winlink.

NOTE: The file size is displayed in **RED** indicating that it is too large to be sent via Winlink.

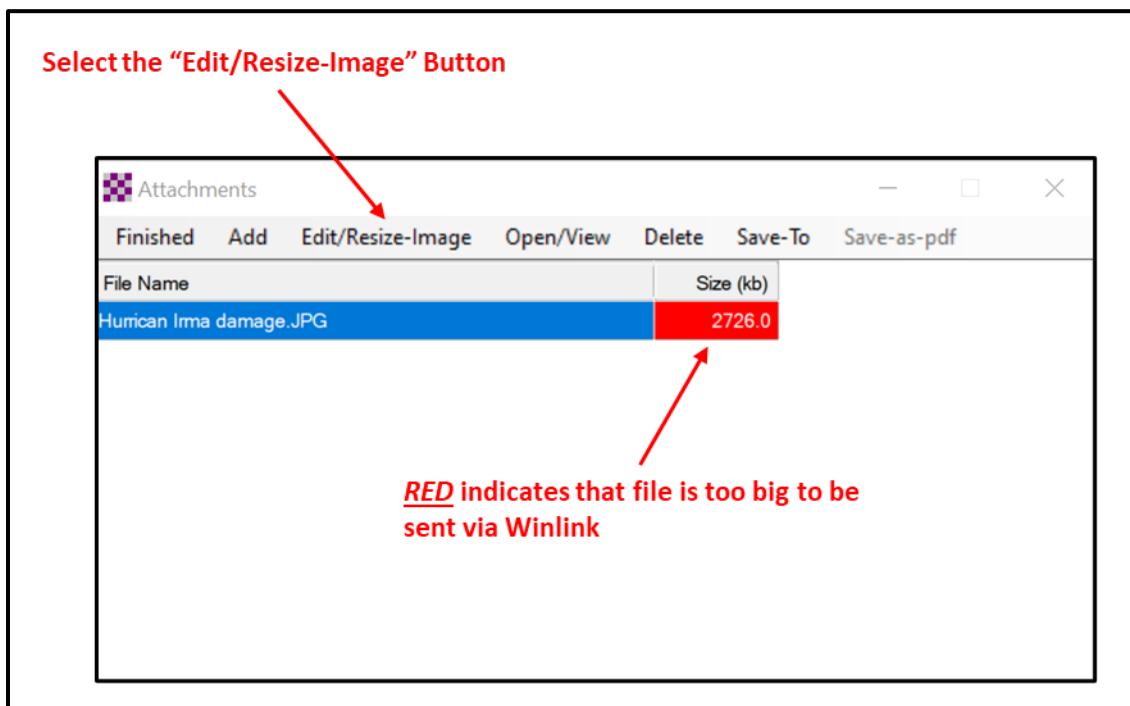


Figure 1. Message Attachment Window

- a. Depress the **Edit/Resize-Image button** to resize the image. Refer to Figure 1 for button location. This will cause the **Image Edit** window, Figure 2, to be displayed. Using this window, the user can crop, resize, or rotate the selected image.

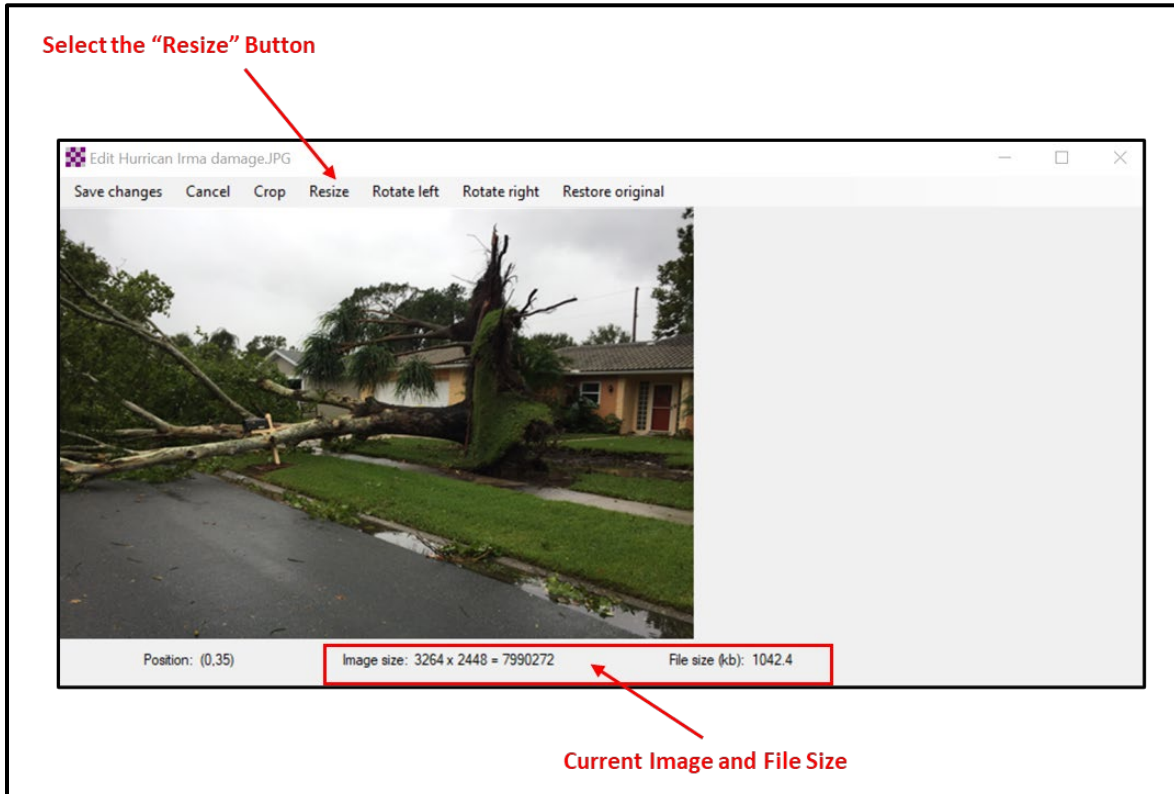


Figure 2. Edit Image Window

- b. Depress the **Resize** button. The Image Resize window will be displayed. Refer to Figure 3.
- c. Enter a file size value in the **Desired size (kb)** block. For this exercise, enter **25**. Then, depress the **Change Size** button.

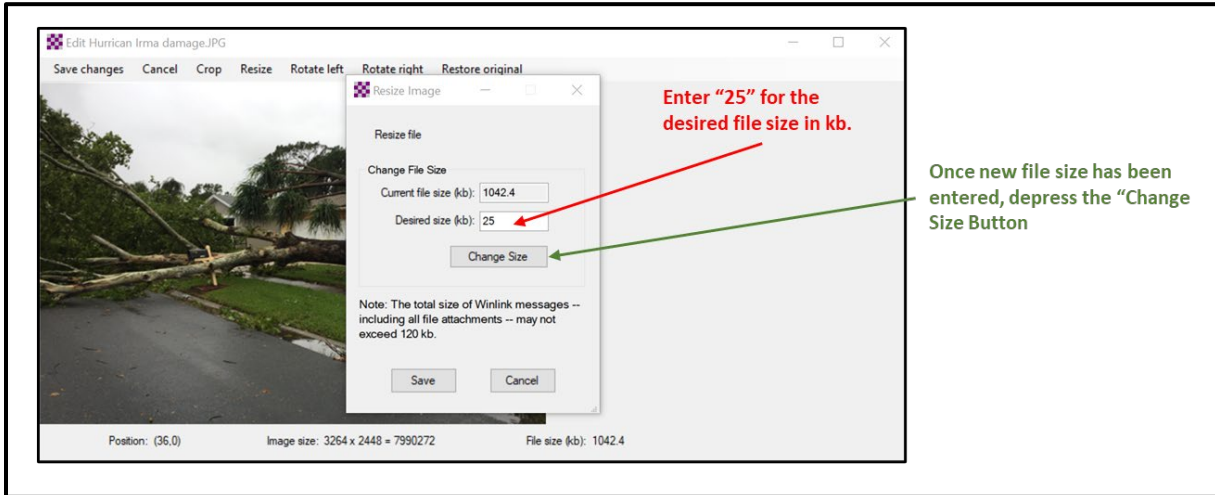


Figure 3. Resize Image Window

- d. The **Current file size (kb)** field, refer to Figure 4, should now indicate that the image has been resized. Depress the **Save** button to save the image size changes.

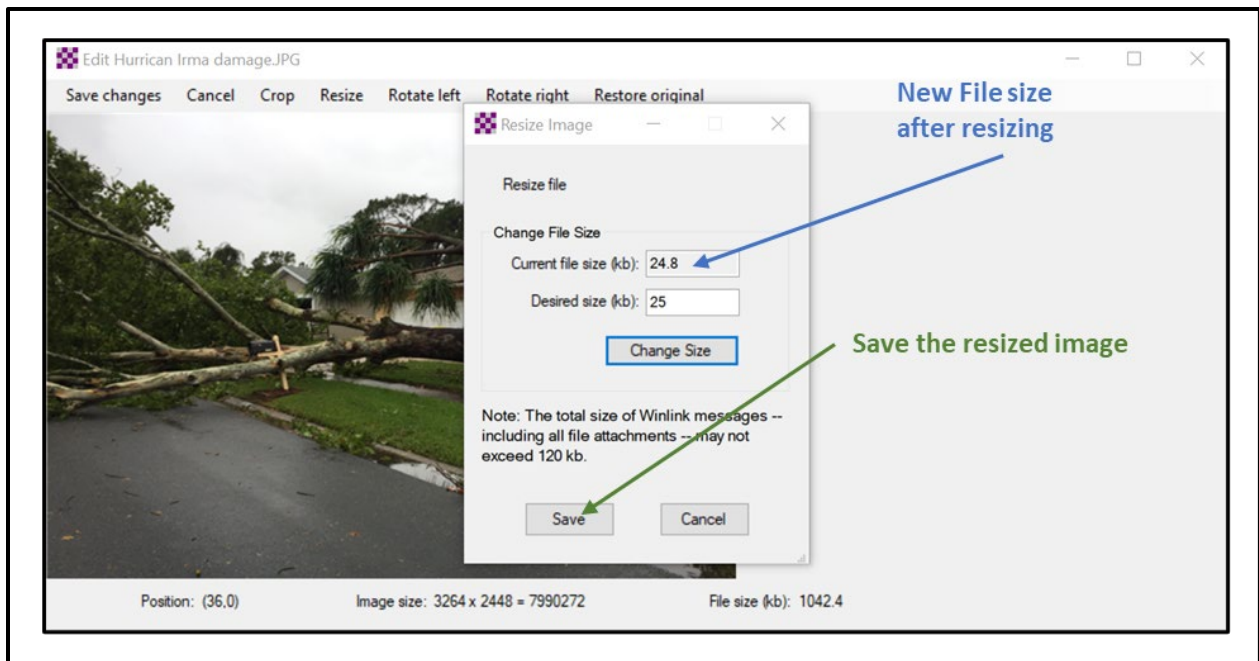


Figure 4. Save Resized Image

- e. Refer to Figure 5. Note that the image and file sizes displayed at the bottom of the window now indicate that the image has been reduced in size to 24.8 kb. From this window, the user can continue modifying the image by using the **Crop**

or **Rotate** options. For this exercise, complete the edit by depressing the **Save Changes** button.

- f. Refer to Figure 6. Depress the **Finished** button on the **Attachment** window.
- g. Send the **Local Weather Report** to all net participants.

NOTE: Even with a reduction in size to 25kb, it will take 5-minutes to send this message via standard Winlink Packet. If instead the message is sent using Vara FM, the transmission time can be reduced to less than 1-minute.

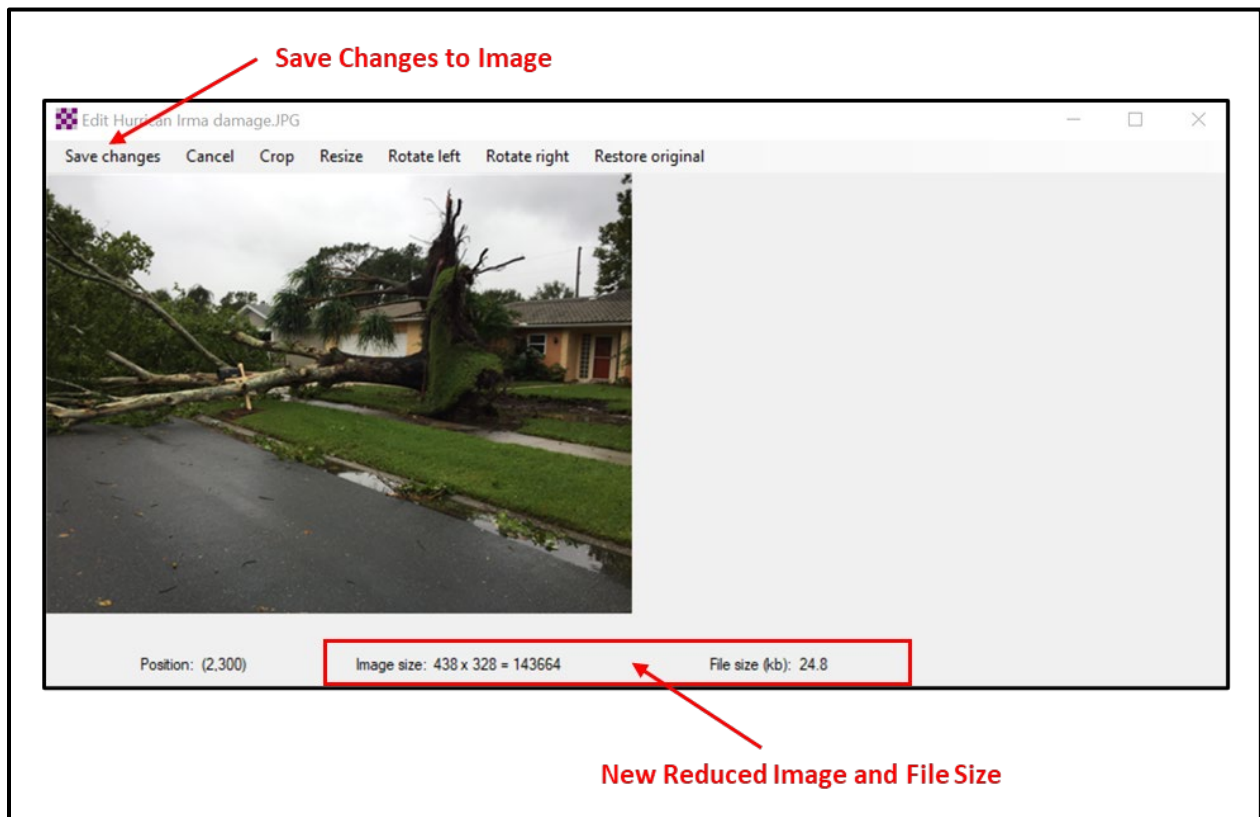


Figure 5. Save Changes

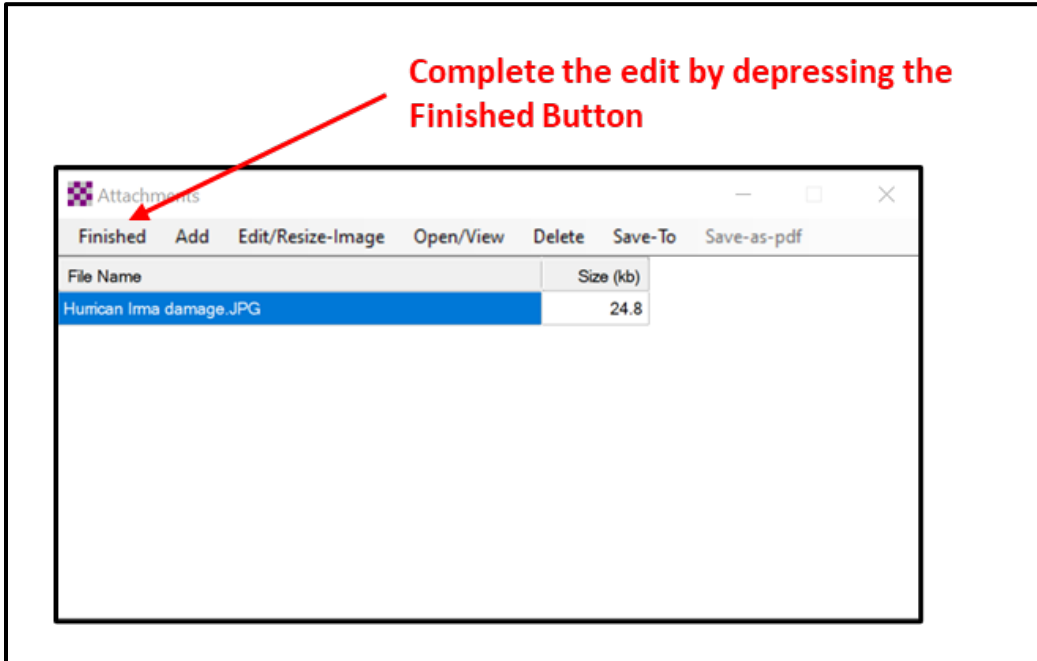



Figure 6. Attachment Window.

1.7 GPS/POSITION REPORT

Winlink units can report their current position to the Winlink system. Once reported, the Winlink Common Message Server (CMS) displays the report on a position map located on Winlink’s web site and forwards the data to the Automatic Packet Reporting System-Internet System (APRS-IS). Anyone with internet access can view these position reports. APRS® applications will display Winlink position reports using the  symbol.

- a. From the Winlink Settings menu, select “**GPS / Position Reports...**”. Refer to Figure 7.

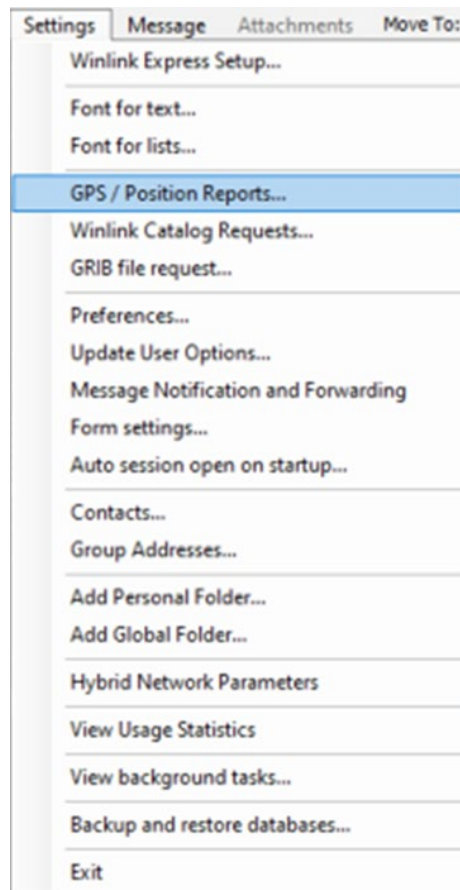


Figure 7. Winlink Settings Menu

- b. Once selected, the menu shown in Figure 8 will be displayed.

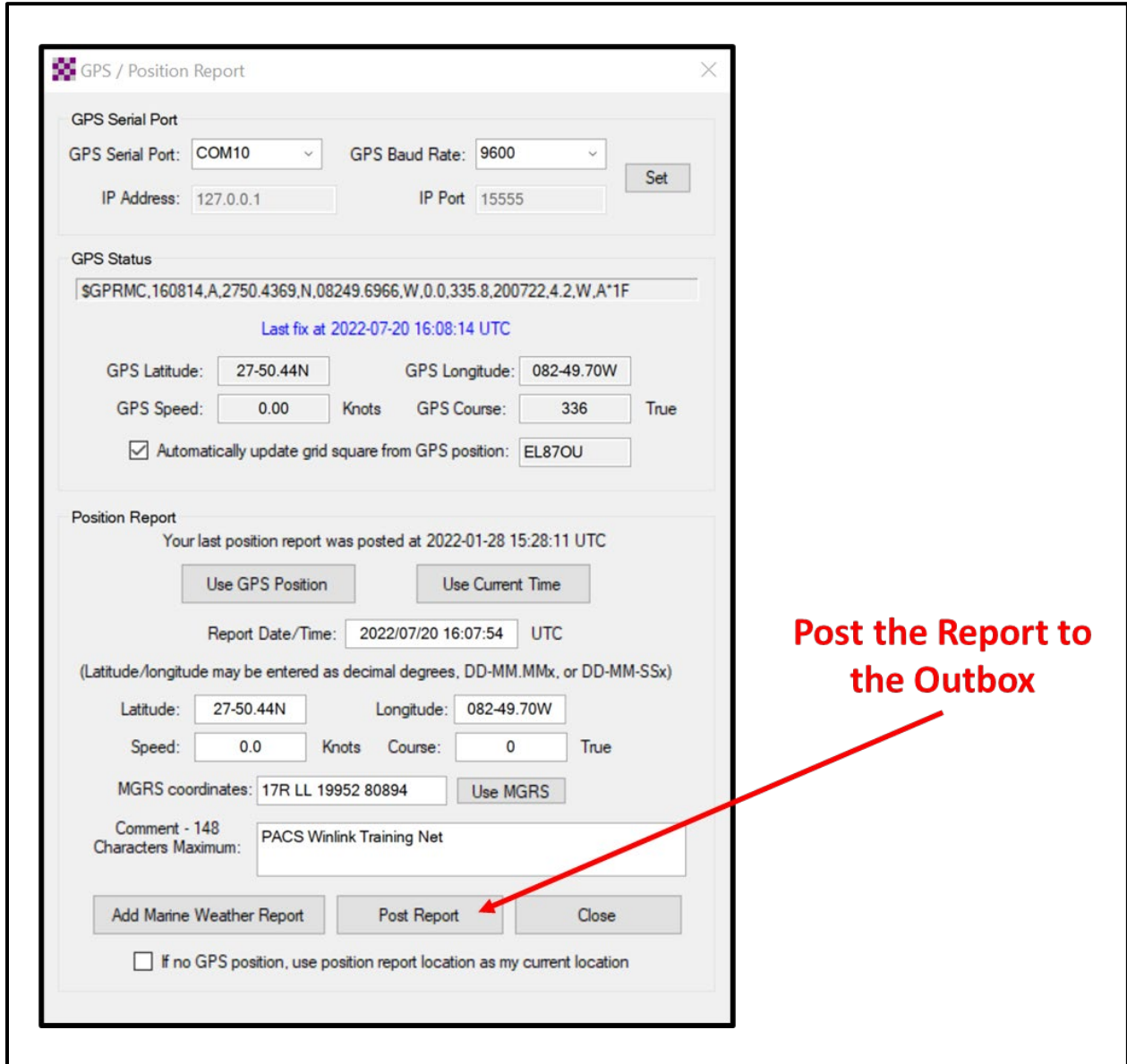


Figure 8. Winlink GPS Position Report Screen

NOTE: Winlink Express can be configured to import NMEA 0183 formatted GPS data through a serial COM port. Once configured, the time and position data needed to create a GPS position report will be automatically available for use in the report. If a GPS is not connected to the Winlink computer, time and position data will need to be entered into the report manually.

- c. The following information should be entered into the report.
 - (1) Report Date/Time: Universal Coordinated Time (UTC)
 - (2) Longitude
 - (3) Latitude
 - (4) Comments: PACS Winlink Training Net

- d. Post the report to the Winlink Outbox and then send the report.