

"Location, Location, Location." Harold Samuel : 1944

Setting your location in Winlink Express.

If you do not have a USB GPS device, get one. Really! They make the rest of the system work so much easier. Some forms explicitly ask for your location. The other may be 'hidden' in the header of the email³. If you follow these instructions your email may have both at your disposal.

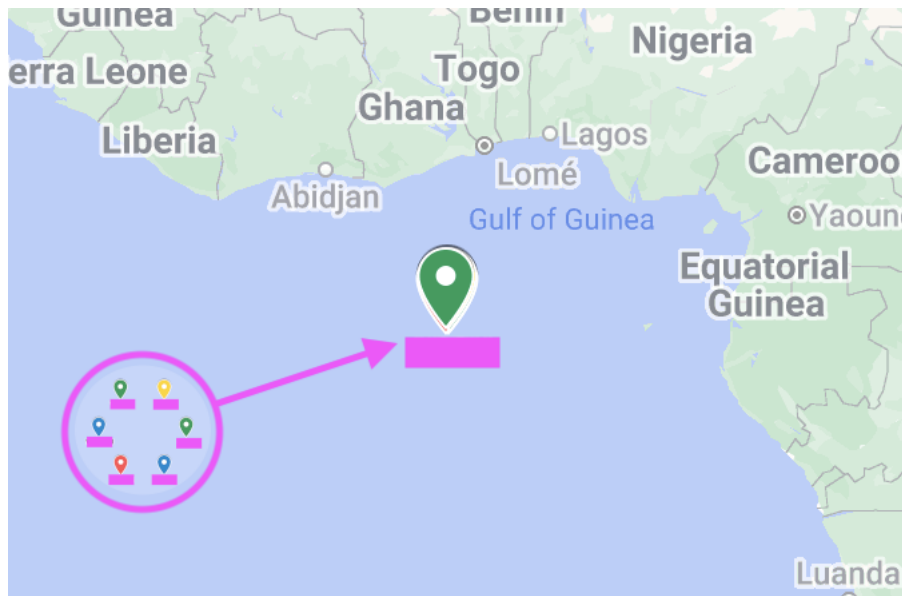
Steps to take, if you have no GPS.

- 1) Launch Winlink Express.
- 2) **Settings** menu item, then **Winlink Express Setup**.
- 3) Enter your current six character Grid Square in the '**My Grid Square**' field.
 - 3a) A good webpage to obtain your Grid Square is:
[Maidenhead Grid Square locator](#)
 - 3b) If you have a Lat/Lon from another source and it is in decimal degree¹ format e.g. 45.4637°, you can paste each value into the Latitude and Longitude Degrees fields found by clicking the 'Lat/Lon to Grid Square' button. Don't worry about the Minutes portion. Click Calculate then Accept. This will update the '**My Grid Square**' field.
 - 3c) To easily obtain a Lat/Lon, use Google Maps. Zoom into your location, then right click. This brings up a disclosure dialog. Click on the first line. This will copy the Lat/Lon pair to your clipboard. You can then use a simple text editor to extract only the values you want.
- 4) **Settings** menu item, then **GPS / Position Report**. If no GPS device is present, all we need to focus on is the bottom third of this dialog. *Unfortunately, entering the Grid Square on the Setup dialog does not auto-fill in the latitude or longitude on this dialog.*
- 5) Using the Lat/Lon obtained by one of the above methods, fill in the two fields. The values presented are presented in an arcane format. Don't worry, Winlink Express will accept the degree decimal¹ format just fine and convert it.

5a) Note here that you must enter a negative value for a West longitude e.g. -122.1234° . In 3b above, you had a radio buttons to select N/S or E/W.

Forgetting the minus sign is a VERY COMMON error.

5b) An example of missing or invalid location is the ROSAZZI (Ring of Shame around Zero Zero Island). Every exercise has placed someone, sometimes many folks off the East coast of Africa at $0.0000^{\circ}\text{N } 0.0000^{\circ}\text{E}$, when they did not enter any Lat/Lon information at all. Inaccurate values for Lat/Lon (e.g. missing the minus sign) may drop your pin in Mongolia!



6) Once the Lat/Lon pair are correctly entered, check the box for 'If no GPS position, use position report location as my current location'.

If no GPS position, use position report location as my current location

This is VERY important as it sets a value within the Winlink / RMS system of your current location that will be used to fill forms and templates later.

7) Click 'Post Report'. This will place an item in your Outbox that needs to be sent in.

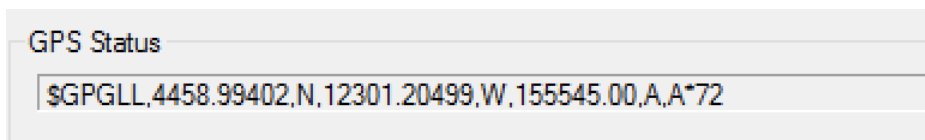
8) Run a session to send your Position Report. If you are going to run without a GPS, this step is ESSENTIAL. I can not stress this enough! Winlink must have a standing position report 'on file'.

If you do nothing more than the above, the templates that you send in to the ETO will have enough information to map your entry. Even if you have a GPS, you should still send a Position Report. *One caveat: if you are using a virtual machine many GPS devices may fail to be recognized. Thus you will be stuck with only the above methods of setting your location.*

Setting up and using a GPS device within Winlink Express.

[for a more detailed explanation, visit: [ETO's FAQ](#) page.]

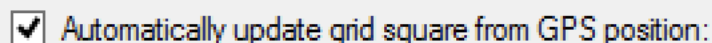
- 1) Insert your GPS and wait until it blinks with an active fix.
- 2) Determine the COM-X Port that Windows has assigned to your device².
- 3) Launch Winlink Express.
- 4) **Settings** menu item then **GPS / Position Report**.
- 5) Set the GPS Serial port to the port that has been assigned to the device². Set the speed to either 4800 or 9600 depending upon your device and driver.
- 6) Shortly, you should begin to see NMEA sentences in the GPS status field.
E.g.



GPS Status

```
$GPGLL,4458.99402,N,12301.20499,W,155545.00,A,A*72
```

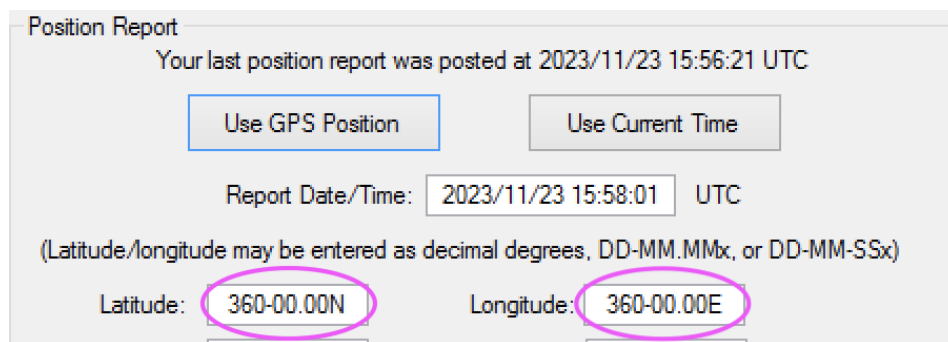
- 7) Shortly, the GPS Latitude, Longitude, Speed and Course will be updated.
- 8) Make certain that the checkbox for 'Automatically update grid square from GPS position' is checked'.



Automatically update grid square from GPS position:

9) Click on 'Use GPS Position', this will fill in the fields below.

9a) If you have previously used a GPS then run Winlink Express without it you may find an interesting artifact. You may find that Winlink Express has entered 'default' values of 360-00.00N and 360-00.00E into the Lat/Lon fields.



This location does not exist in real life and is often a cause for negative feedback. If you are going to use a GPS, then populate the fields from the GPS data stream!

10) Make certain that the checkbox for 'If no GPS position, use position report location as my current location' is checked. You did file a Position Report, didn't you?

If no GPS position, use position report location as my current location

11) Click on 'Post Report' to create and move to the Outbox, an item to be sent. This is minimally less important to do if you are using a GPS, but it still has value.

12) Close the dialog. Run a session to send the Position Report.

Last item. Go to **Settings**, then **Preferences** and make sure that the checkbox for 'Include your location in message headers' is checked. Checking this box puts your location into the header of the message even if the Template or Form does not explicitly contain the Lat/Lon.³

Include your location in message headers

1. There are a number of formats used for the values of latitude and longitude. The advent of GPS added to the confusion. In science, a measurement of arc is generally written as 45° 32' 27'' and is read as 45 degrees 32 minutes 27 seconds. This is shorthand as DDMMS format. This is a very cumbersome format to use for calculations, thus decimal degree (DD) format is most often used, e.g. 45.540833°. [45° 32' 27'' = 45.540833°]. This format is what Google Maps uses. There are more subsets and variations on this theme e.g. DD MM.mm DD-MM.mm. The last one is what Winlink Express uses as a holdover from its origins.

2. Windows can be unpredictable about assigning COM ports. If you plugged your GPS device into a particular port on your computer, then removed it, then re-inserted it, it may not be assigned the same COM port it had the first time. The Device Manager is the best tool to use to find out what port has been assigned. Winlink Express only remembers the last COM port used and can not, on its own, search for your device. [for a more detailed explanation, visit: [ETO's FAQ](#) page.]

3. The header of an email contains everything that the various email servers need to route your message correctly. Also included is the route that the message took to arrive. Winlink Express can add a line item to the header that includes your location information if you are using a GPS device. This holds true even if you are using a Telnet session. The reverse is also true: if you have no GPS and run a Telnet session, your location may NOT be included in the header information. The WDT is now aware of this and plan on a remedy. This info is ignored by most email services but can be read by the ETO and thus used to drop a pin on a map.