# The following are the steps to find and download FlDigi and FlMsg, and how to walk through the setup process on a Windows computer. (always double check for the latest versions)

https://sourceforge.net/projects/fldigi/files/

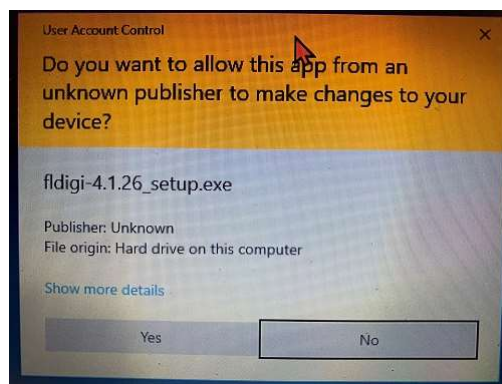https://sourceforge.net/projects/fldigi/files/flmsg/

#1 Locate your downloaded file in your download folder (or another folder if you have set a different default folder), launch the setup program.
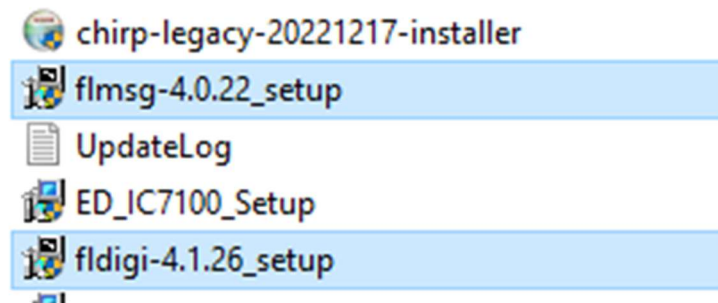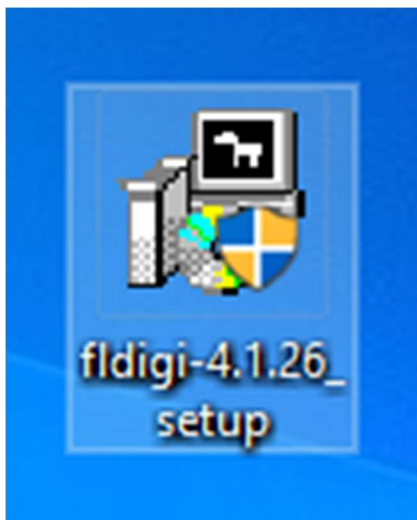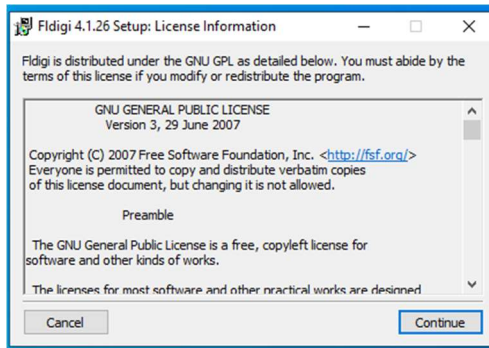

The following will show you what to expect on a click by click walk through, after you click on the file above.
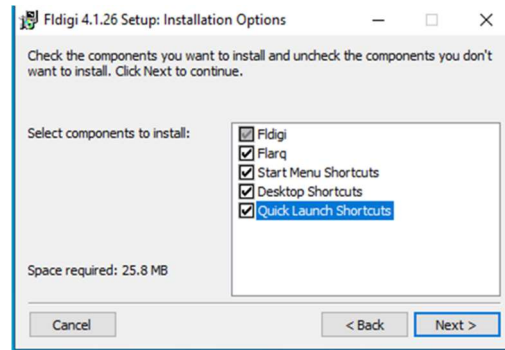
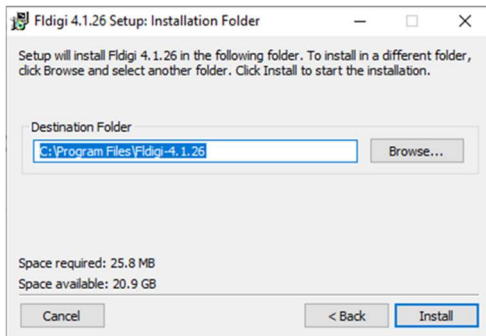2. You will get the standard windows warning first, click on yes.

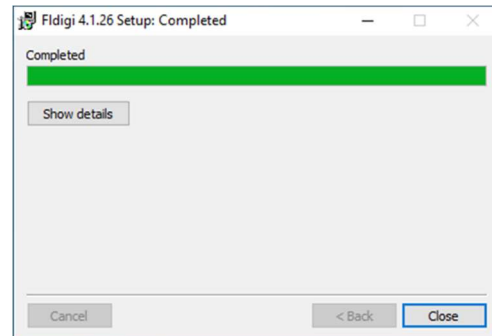3. The license screen will appear next, click

on continue.

4. Select your install options and select NEXT.

5. Select your destination folder for the install of the FlDigi files
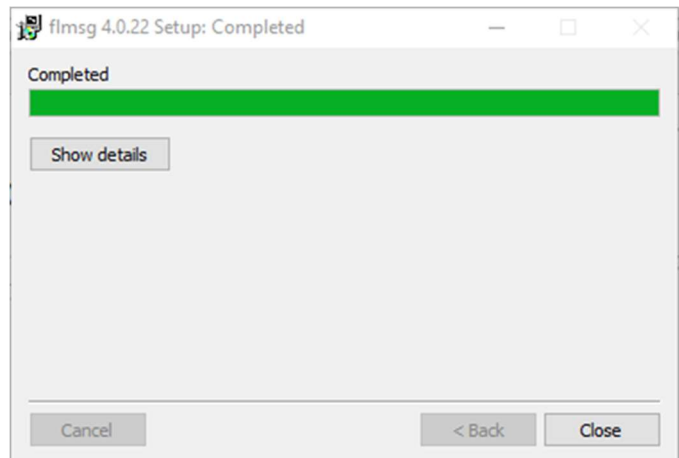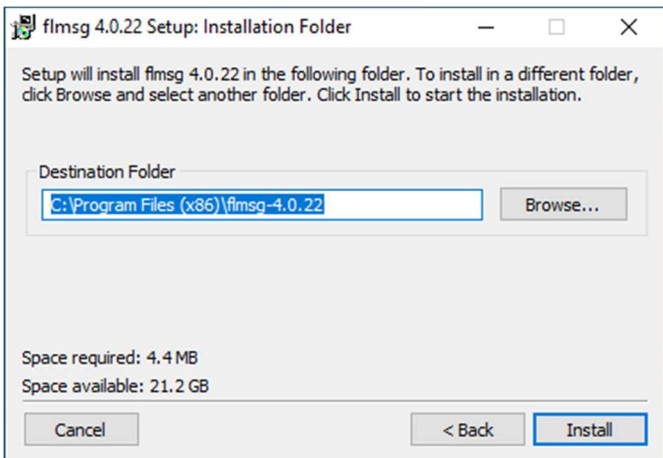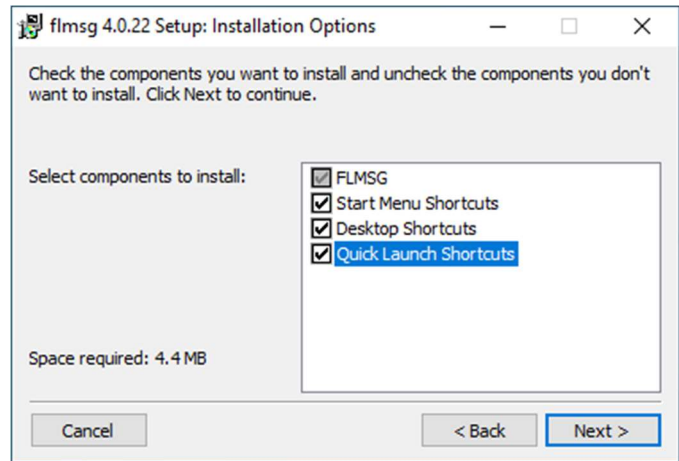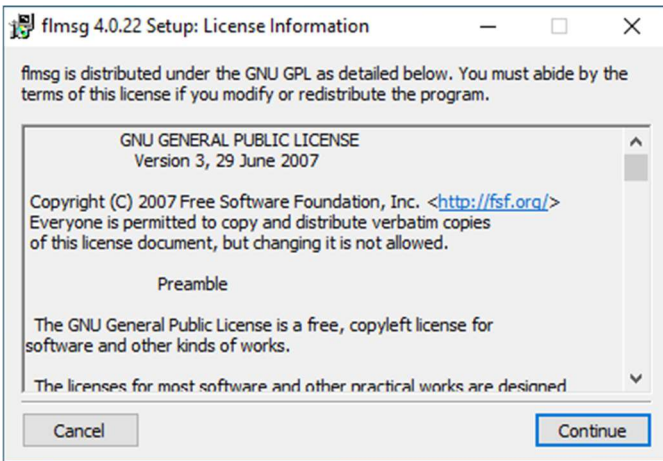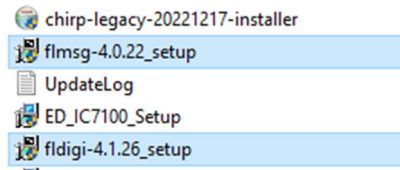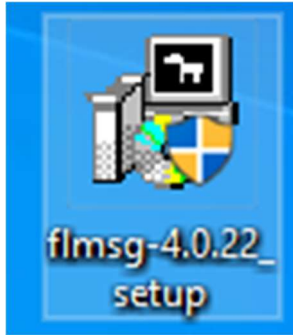

6. Congrats, that's it FlDigi is installed. locate the FlDigi icon on your desktop to launch the program

7. Locate the FlDigi icon on your desktop to launch the program (The number will change with the current updated version.

The same steps (program name is different) are repeated for FlMsg as you did for FlDigi.

chirp-legacy-20221217-installer
flmsg-4.0.22_setup
UpdateLog
ED_IC7100_Setup
fldigi-4.1.26_setup

---

flmsg 4.0.22 Setup: License Information

flmsg is distributed under the GNU GPL as detailed below. You must abide by the terms of this license if you modify or redistribute the program.

```
        GNU GENERAL PUBLIC LICENSE
           Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <http://fsf.org/>
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

           Preamble

 The GNU General Public License is a free, copyleft license for
software and other kinds of works.

 The licenses for most software and other practical works are designed
```

Cancel   Continue

---

flmsg 4.0.22 Setup: Installation Options

Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.

Select components to install:
- ☑ FLMSG
- ☑ Start Menu Shortcuts
- ☑ Desktop Shortcuts
- ☑ Quick Launch Shortcuts

Space required: 4.4 MB

Cancel   < Back   Next >

---

flmsg 4.0.22 Setup: Installation Folder

Setup will install flmsg 4.0.22 in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation.

Destination Folder
C:\Program Files (x86)\flmsg-4.0.22   Browse...

Space required: 4.4 MB
Space available: 21.2 GB

Cancel   < Back   Install

---

flmsg 4.0.22 Setup: Completed

Completed

[green progress bar]

Show details

Cancel   < Back   Close

RADIOGRAM
VIA AMATEUR RADIO

flmsg 4.0.20

****** SETTING UP FLDIGI ******

1. Note: Please check for the latest revision date (above) of these instructions. This document will be updated as we progress with our training to correct errors and add additional features.
2. Top Half is the setup of Fldigi
3. Bottom Half covers the setup of Flmsg
4. If you are using Windows, download and install fldigi-4.2.03_setup.exe and flmsg-4.0.23_setup.exe
5. You may also want to download http://www.w1hkj.com/beginners.html, fldigi-help.pdf and flmsg-help.pdf
6. ***Note that some screen shots are from previous versions***.
7. The first thing to do when setting up Fldigi is to enter your Operator information. Click Configure, Config Dialog, Operator. Then enter your personal info (Except for your callsign and name, enter as much or as little as you want).
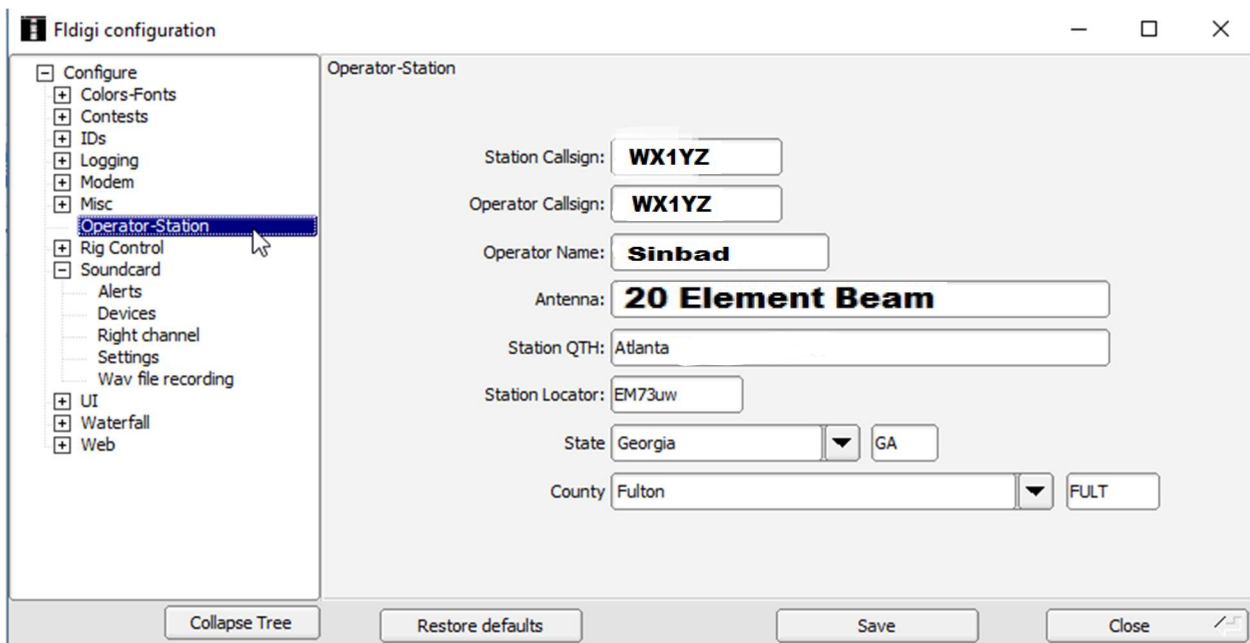

9. Set up your PC soundcard for either acoustic coupling or, if you have one, your sound card interface. (i.e SignaLink). For acoustic coupling, use your PC's default capture and playback devices. (The ones built into the PC.) Note: Check your Windows settings to make sure your internal mic & speaker are operational. (On a Windows 10 PC, right click the speaker icon on the bottom right of your screen, then left click "Playback devices".)

10. The image below is for a USB interface. Radios with on board sound cards (IE: Icom 7300, Yaesu Ft-991), once you have it plugged in and setup on your computer, you should see something similar to the wording in the Capture and Playback boxes. Select that for your device interface.
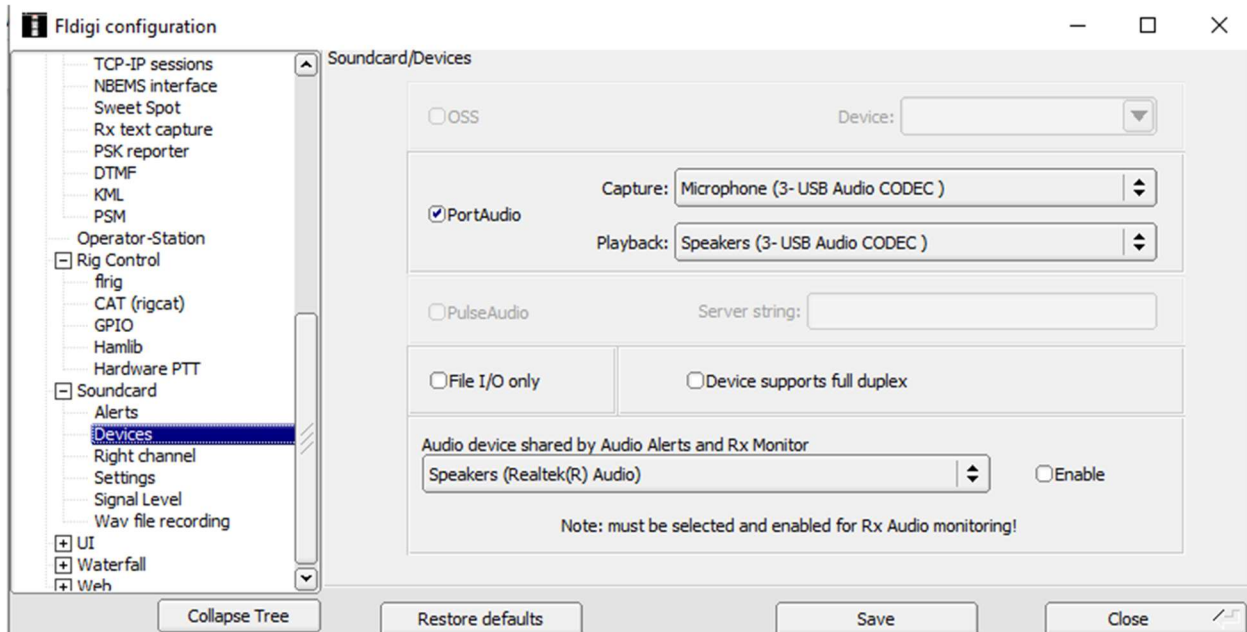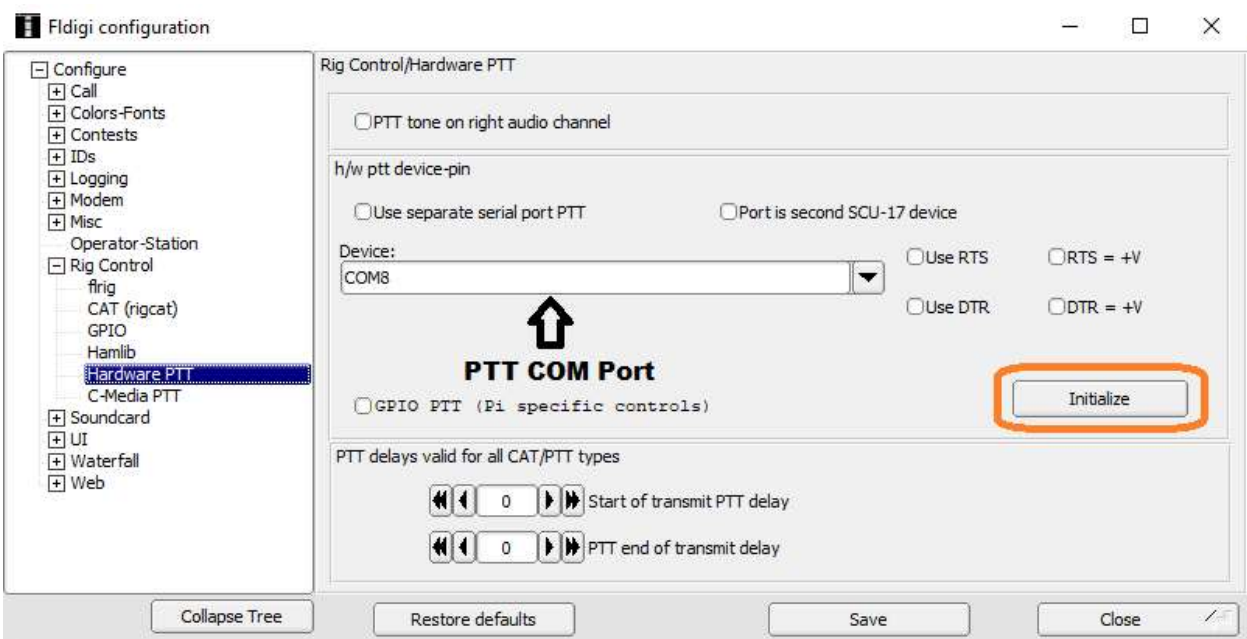

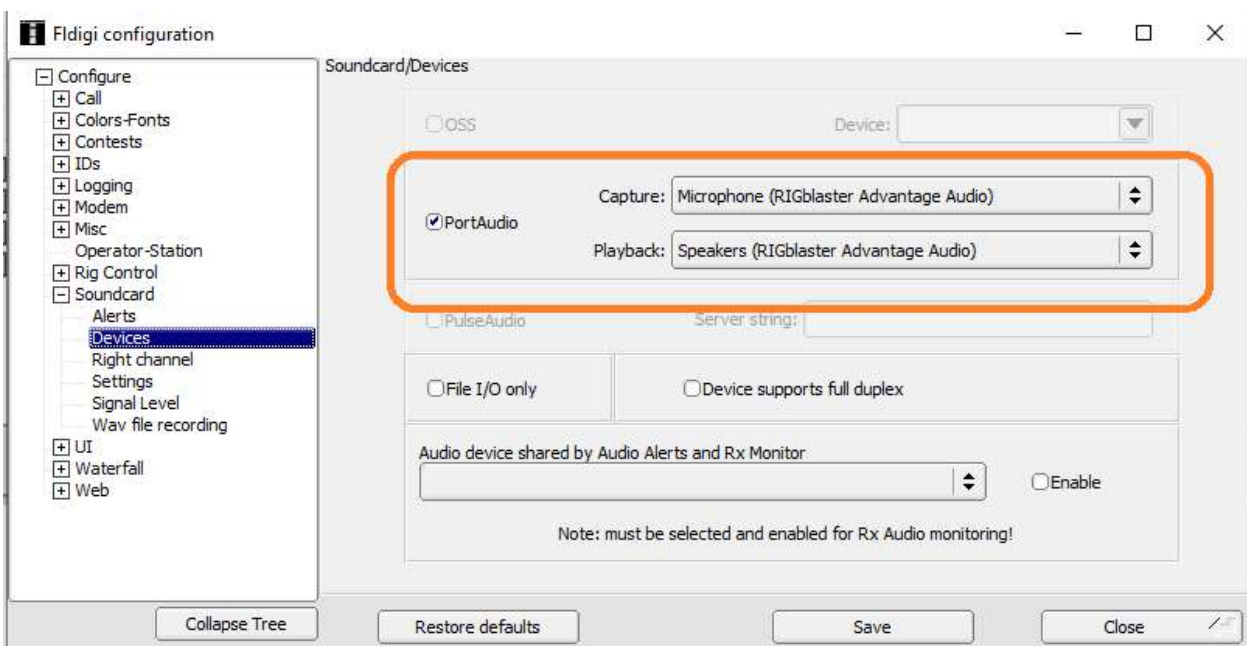# ********Digital Interfaces Help Area********

11. The images below are for a Digital external interface. RigBlaster in this example, setup is the same for Signalink (as far as I remember). You will need to know or locate your Rig's COM ports to set this up (you can find this in Device Manager under COM/LPT ports). The other settings will be in your Rigs user Manual or your Digital interfaces user manual (if you have set up FT8 or Winlink already look there for a quick reference).
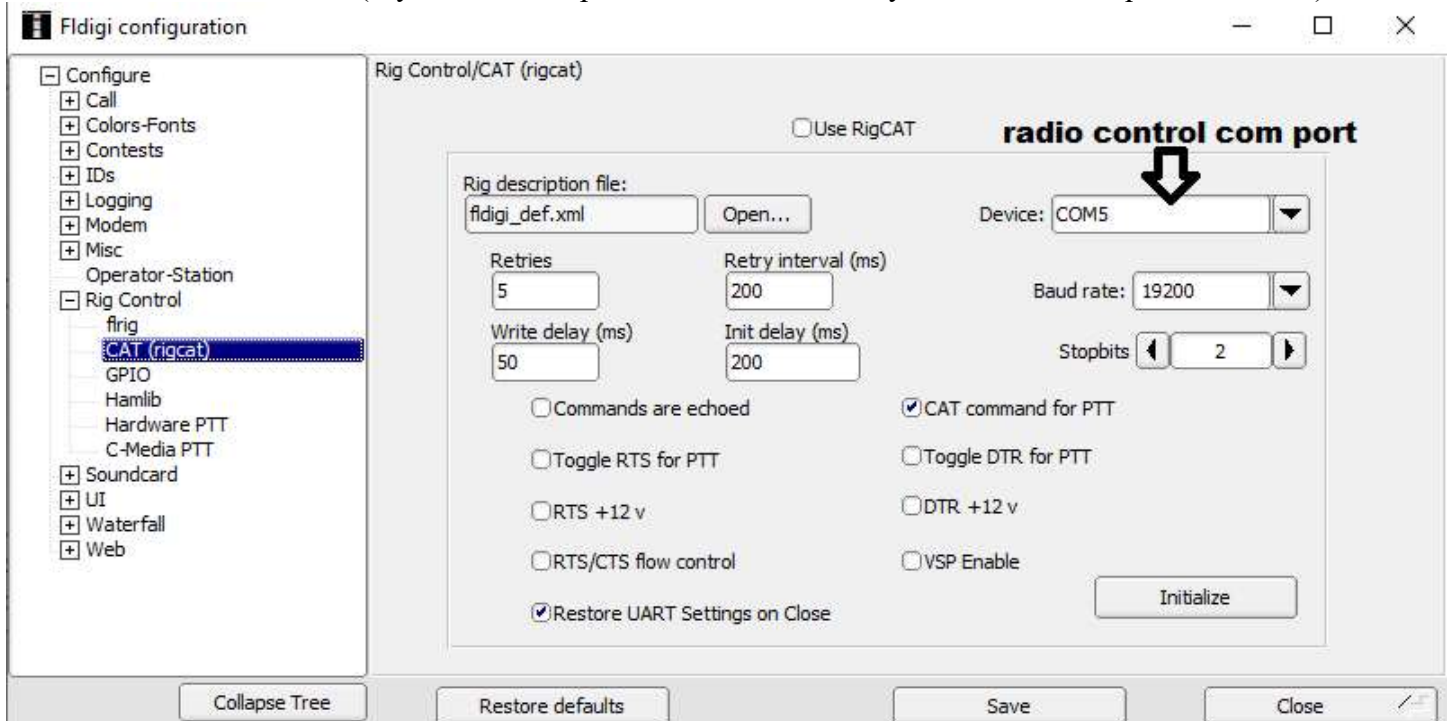
12. Under the Hardware PTT tab on the left, select your Rigs COM Port for PTT, once you have this selected click on the Initialize button, FlDigi should now take control of your Rig, you should hear your rig change frequencies/modes etc, when you do this.
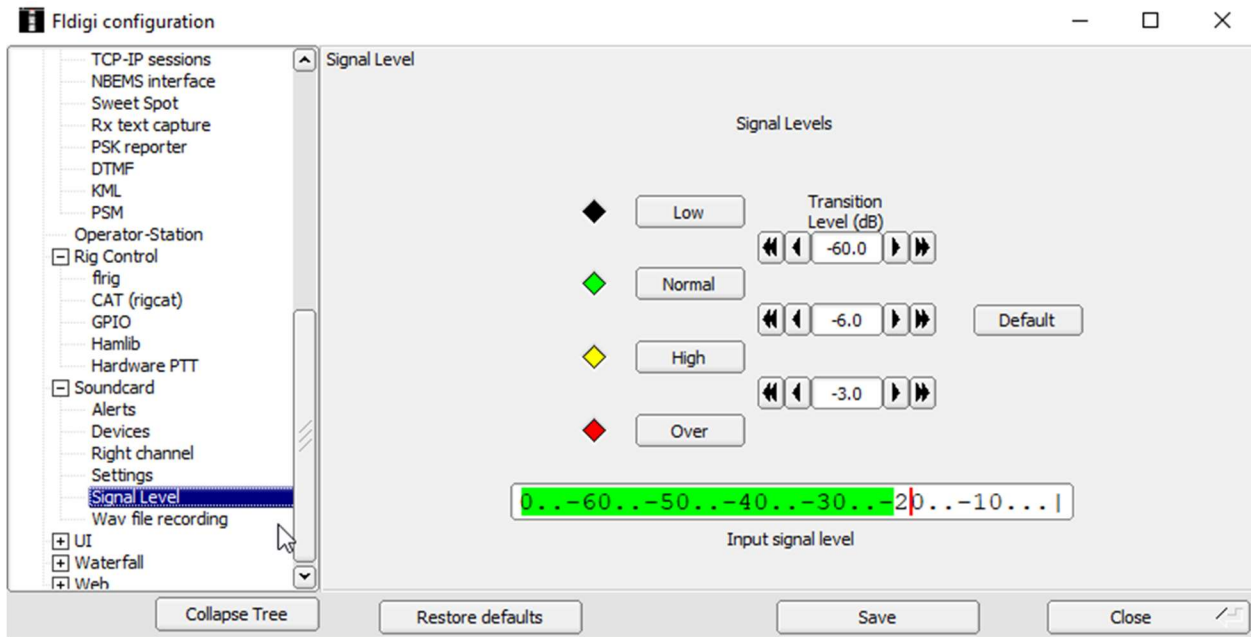

13. Next, go to the Soundcard tab, and then Devices. Here you will select your Capture and Playback settings. See step #9 for more details.


*********END OF DIGITAL INTERFACE AREA*********

14. Note that your RX Signal level can now be viewed on the Signal Level tab. If you change your Signalink RX setting, you will see the Input Signal Level change. The goal is to keep it in the "Normal" green zone.


15. Since we will be using MT63-1000S, for the GA ARES Traffic Net, Click on Configure, Config Dialog, Modem, MT-63 and check the **_four_** boxes as shown below. (Transmit lower and upper tone settings are not critical.)
Make sure that "8-bit extended characters (UTF-8)" **_is_** checked, and "Manual tuning" is checked.

Note: Wayne, KG5WU, discovered, *(with a lot of good detective work)* that the <NUL> problem was caused by having "8-bit extended characters (UTF-8)" **_un_**checked.
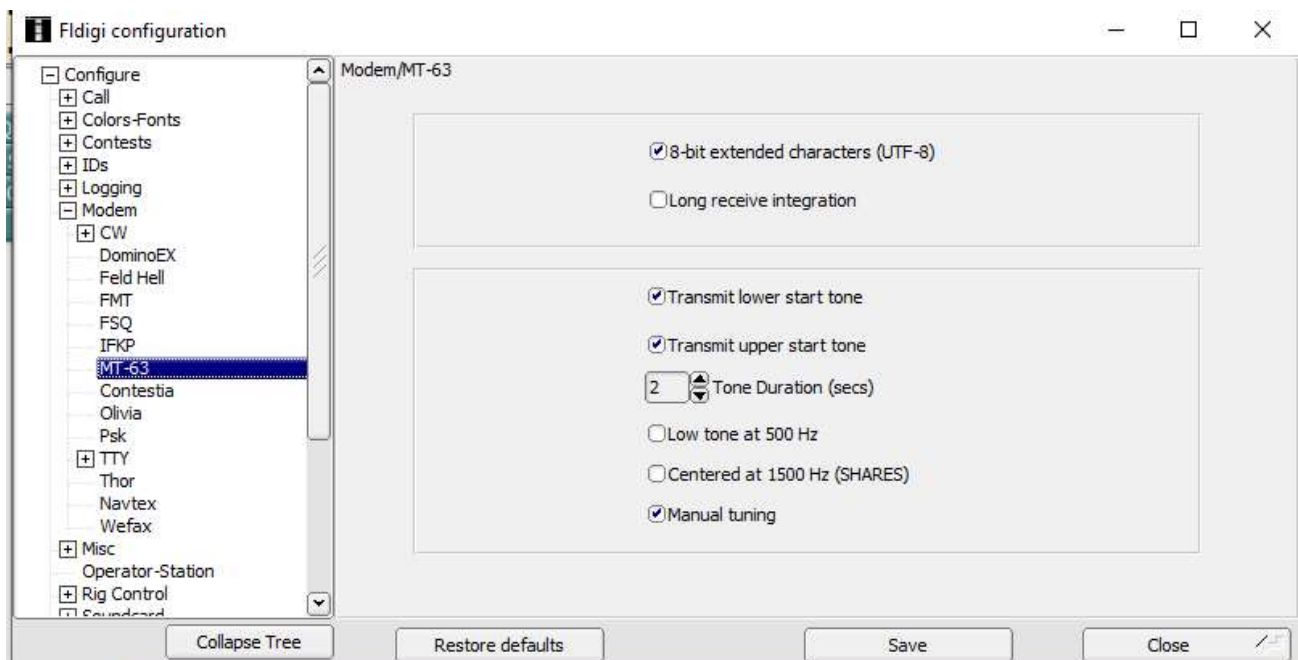
16. Set the Operating Mode to MT63-1000S (Note that the "S" and "L" {Short & Long}
options were available under Configure, Modems, MT-63 in previous versions, but are
now available only under "Op Mode". Sending and receiving stations must have the
same setting to have the transmissions decoded.)
   ***For the GA ARES Check In net, simply select PSK-125, no other changes needed.***
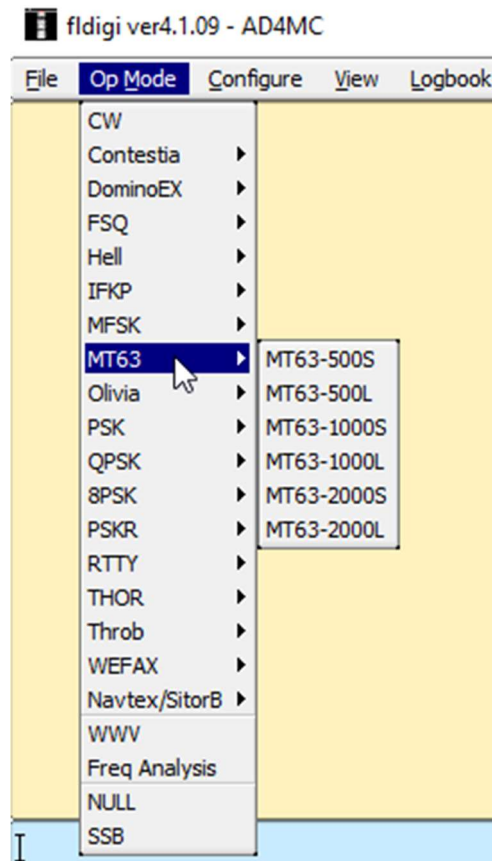
17. The Radio mode for GA ARES Nets is USB.
   (I will be covering the use of Flrig, in a different document, but you may want to
   investigate adding this useful program if you plan to use the Fldigi system for HF
   operations or if you have an HF/VHF/UHF All in one radio.) Note that fldigi can directly
   control most radios without the need for flrig. FLRIG is a transceiver control program
   designed to be used either stand alone or as an adjunct to FLDIGI

18. Verify that <u>C</u>onfigure, Config Dialog, Waterfall, Display, "Always show audio frequencies" is checked.
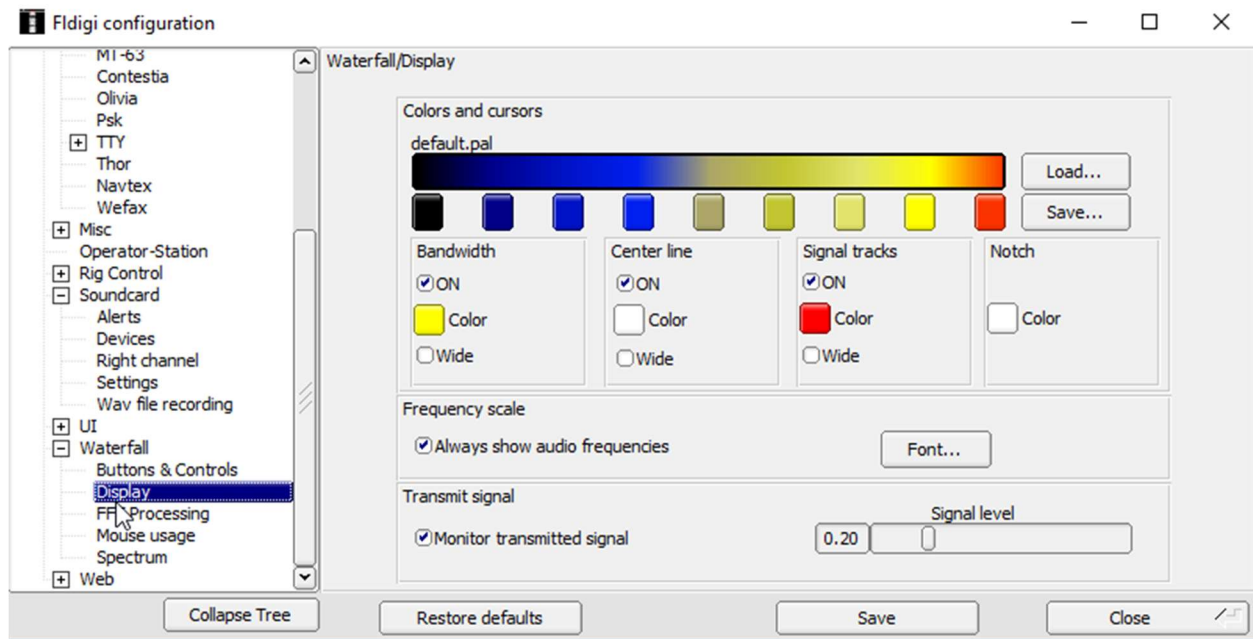
19. Verify that your Waterfall looks like the one below
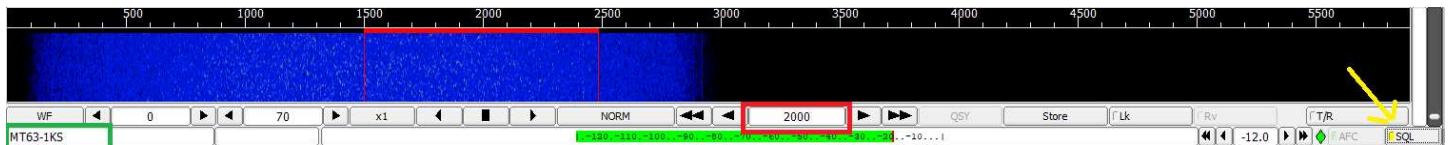
Note 1: If you do not see "2000" for the Center Frequency indicator, you will need to adjust this by clicking on the waterfall at the 2000 mark, or by editing the number in the red box in the picture. The green box is where you can confirm you are in MK63-1KS (1000S), the yellow arrow, points to the Squelch box, make sure it is clicked and yellow (ON).

Note 2: The acceptable squelch setting range is fairly narrow. Setting the vertical slider (The one by the yellow arrow) too low (SQL dot turns green) will allow "garbage" letters to show on the screen and setting it too high will prevent the actual text from being decoded, like the voice squelch on your VHF radio allows noise to be heard when set too low and blocks speech when set too high. Suggest sliding it up from the bottom just to the point where the dot turns yellow. The one here is pretty close.

Note 3: To show the offset frequency range of 500 Hz to nearly 2500 Hz, some users will have a "x1" and others will have an "x2" for "waterfall scale". This is dependent on your screen resolution and does not have any effect on transmitted or received signals.

Waterfall receiving the beginning of an ICS-213 form:
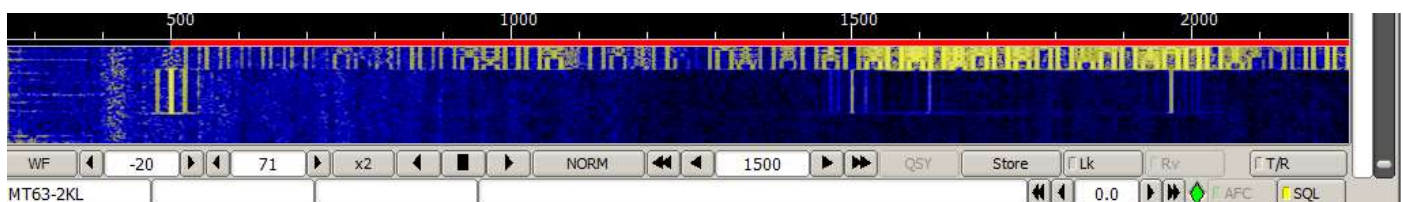
20. To make sending and receiving flmsg forms easier, make sure that the following settings are as shown: Click Configure, Config Dialog, Misc, NBEMS interface...
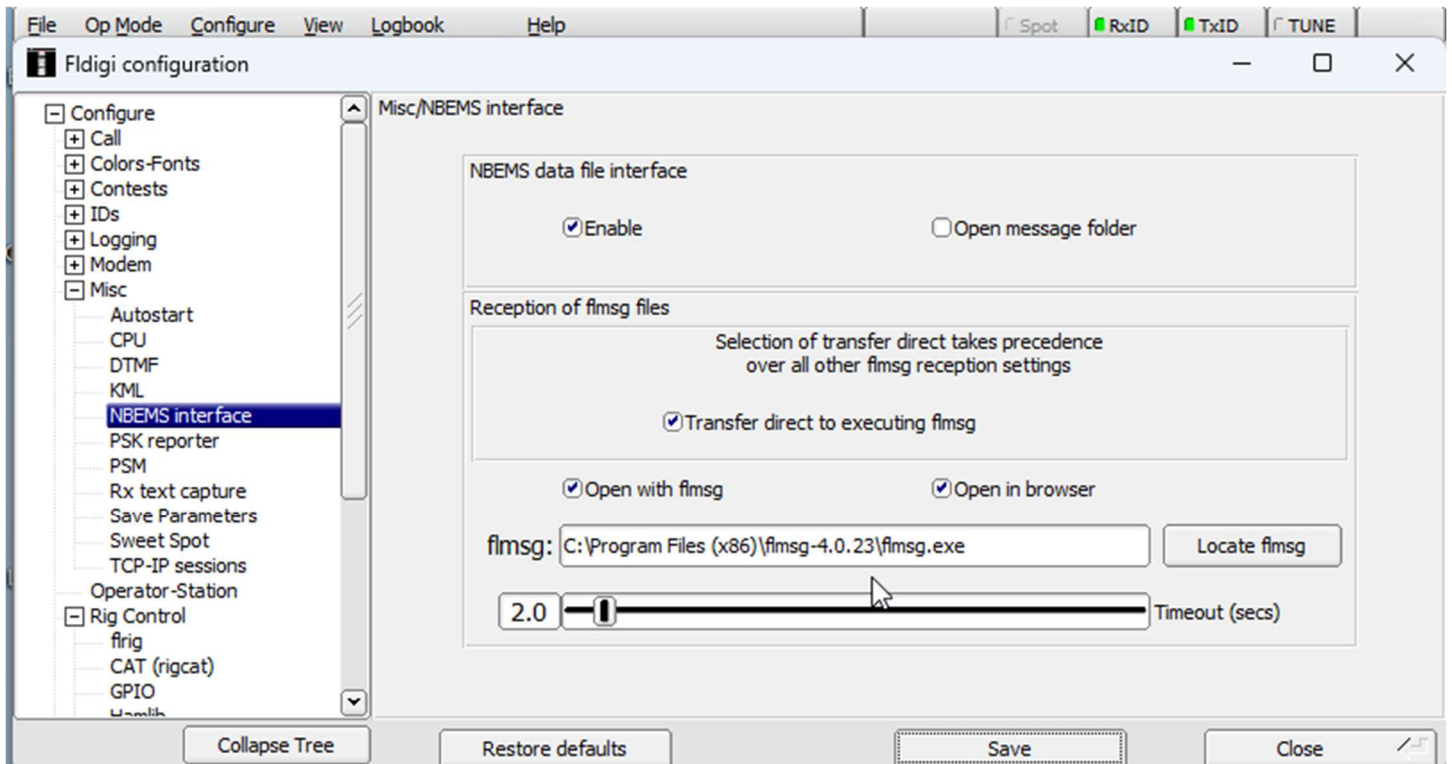
Make sure that the three boxes have a blue check

Click on "Locate flmsg" to find the file "flmsg.exe" and double click on that file name.

For Windows 7-64 bit, it will be in C:\Program Files(86)\flmsg-4.0.23

For other versions of Windows, it will (probably) be in C:\Program Files\flmsg-4.0.23

Note: Fldigi does a great job of keeping all your settings when you install a newer version. Just make sure that you save the new icon for the updated version of fldigi, and delete the old icon because the old icon will still open the older version. The one thing that fldigi is not smart enough to know is if you have updated flmsg. You will have to update the address line to show the latest version of flmsg because fldigi remembers the previous version. In this case, the address line should show flmsg-4.0.23 (NOT fldigi)

21. Computer audio settings need to be set. The following are general settings and may not apply to your PC or operating system, so they are provided only as a guide:
    Right click on the speaker icon in the lower right corner of your screen:
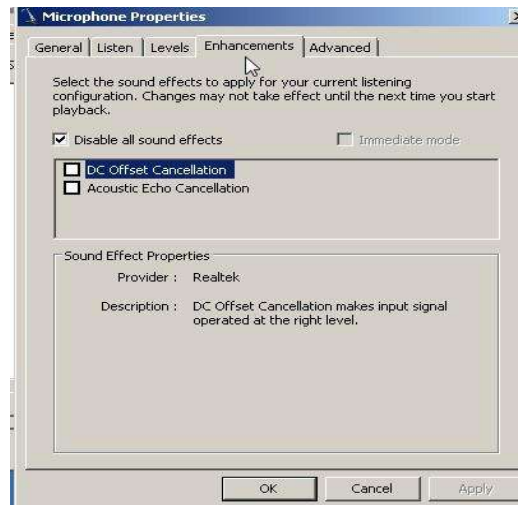

Left click on Recording Devices:

Double Click on the blue Microphone description
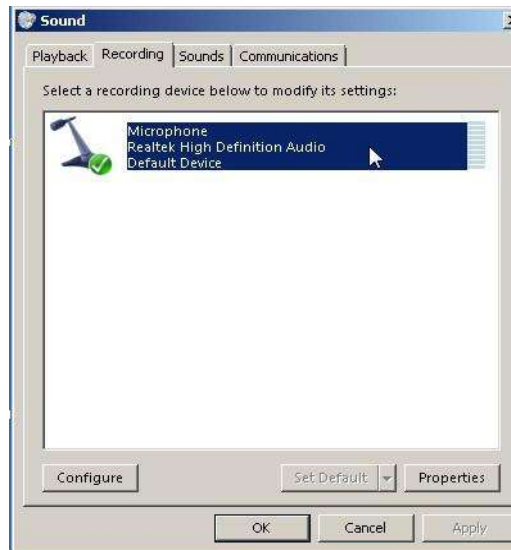

Click on Enhancements

Un-check "DC Offset" and "Acoustic Echo Cancellation" and/or check "Disable all sound effects". Note that these settings are only available for the internal mics or the mic plugged into the 1/8" mic jack.

For all recording and playback devices, except for a RigBlaster or other external sound card device that has external controls, set the "Levels" to 25% to 50% depending on your particular device.

If you are using a RigBlaster or other external sound card device that has external controls, like TX and RX, set the Levels to 100% and fine tune with the sound card device.

22. The following is optional to create more space in the light yellow received area:
Click on View, Controls, None
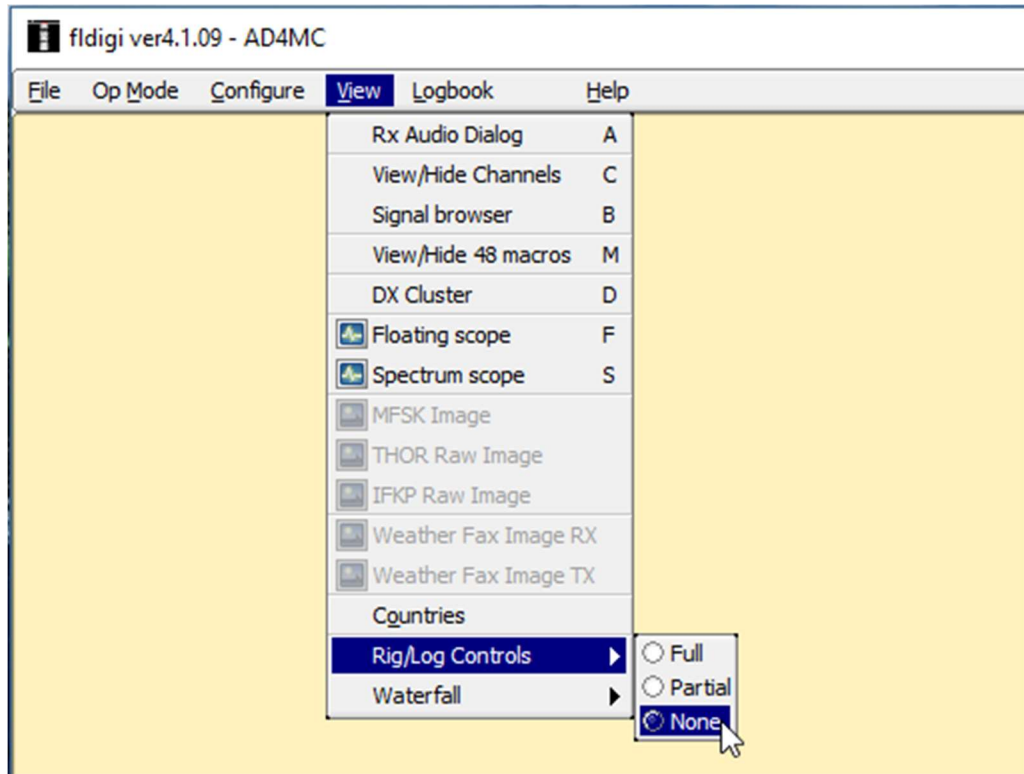
That will remove the three rows below "File" to be shown
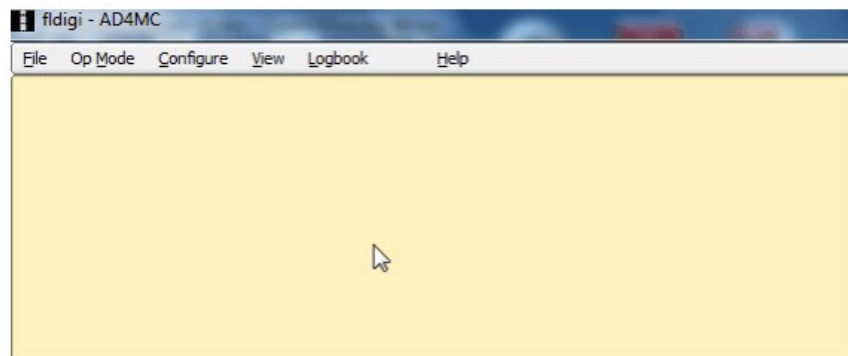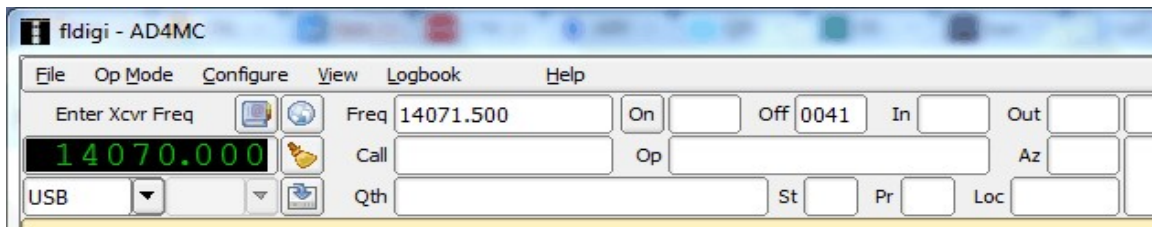
23. You can get those three rows back again by clicking on View, Controls, Full

Save your settings when done, before closing the pop-ups, or click "Configure", then "Save Config".
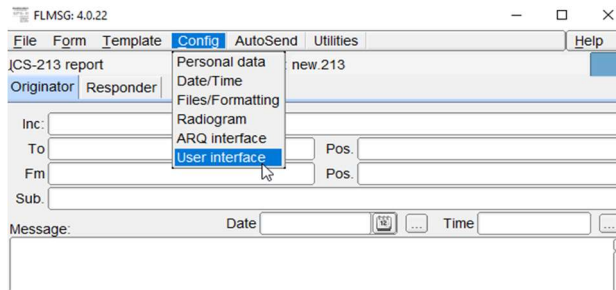
****** SCROLL DOWN FOR FLMSG SETUP ******
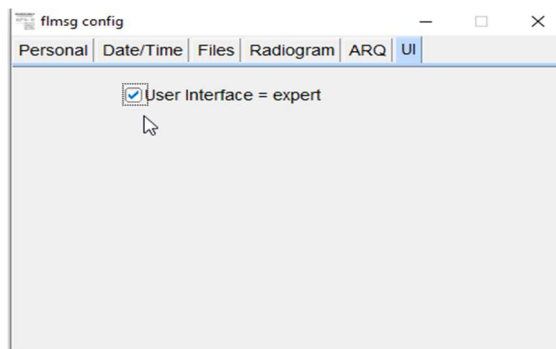
****** FLMSG SETUP ******

Flmsg Setup:

1. Open Flmsg
2. Flmsg now opens in a default non-ham operator mode. To get back to our familiar format, click on **Tools** then **Expert Dialog** You can have flmsg always startup in Expert Dialog mode.
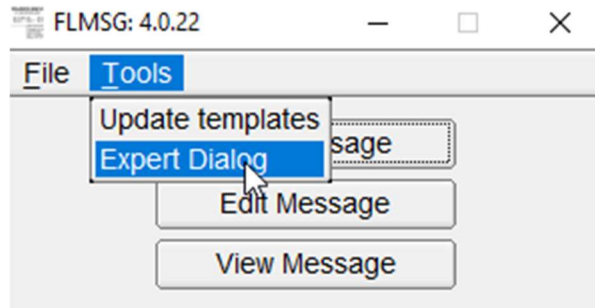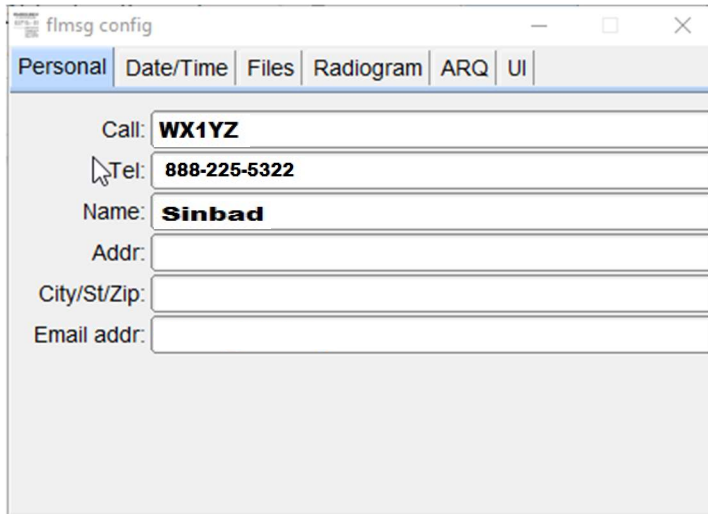

3. Click on **Config**ure, **User interface**

4. **Check** on **User Interface = expert** then close window. The next time you open Flmsg, it will open the familiar form page.
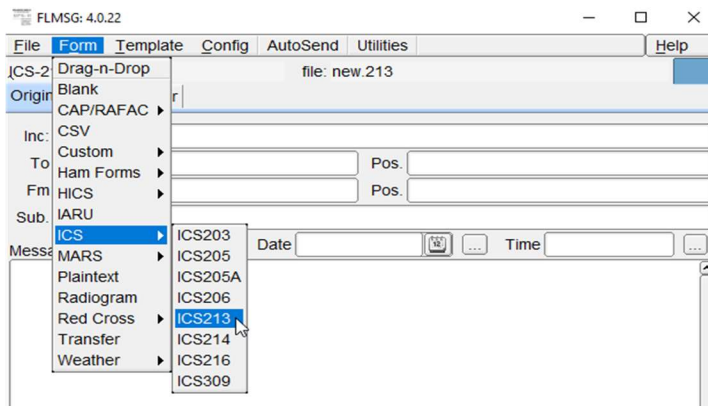

5. Click on Configure, Personal data
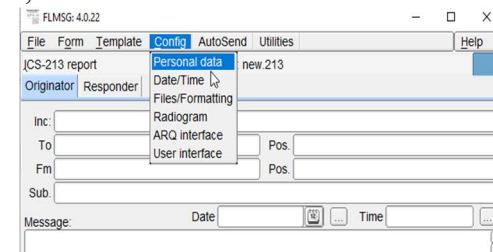
6. Enter your Personal data. It is automatically saved. (Only your callsign is required)
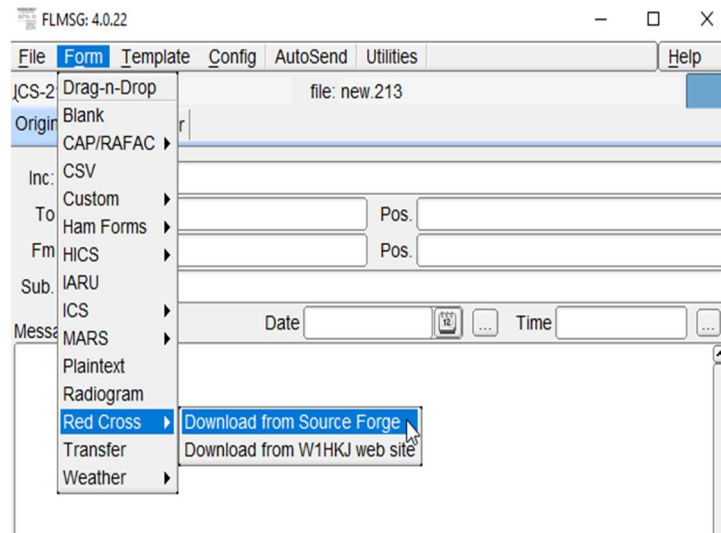
7. Form, ICS213 will be used for most EmComm work.

8. Red Cross Forms are stored in the Forms, Custom folder. They must be downloaded from Source Forge. **NOTE: The forms can now be downloaded from http://www.w1hkj.com/files/flmsg/ARC_custom_forms/**
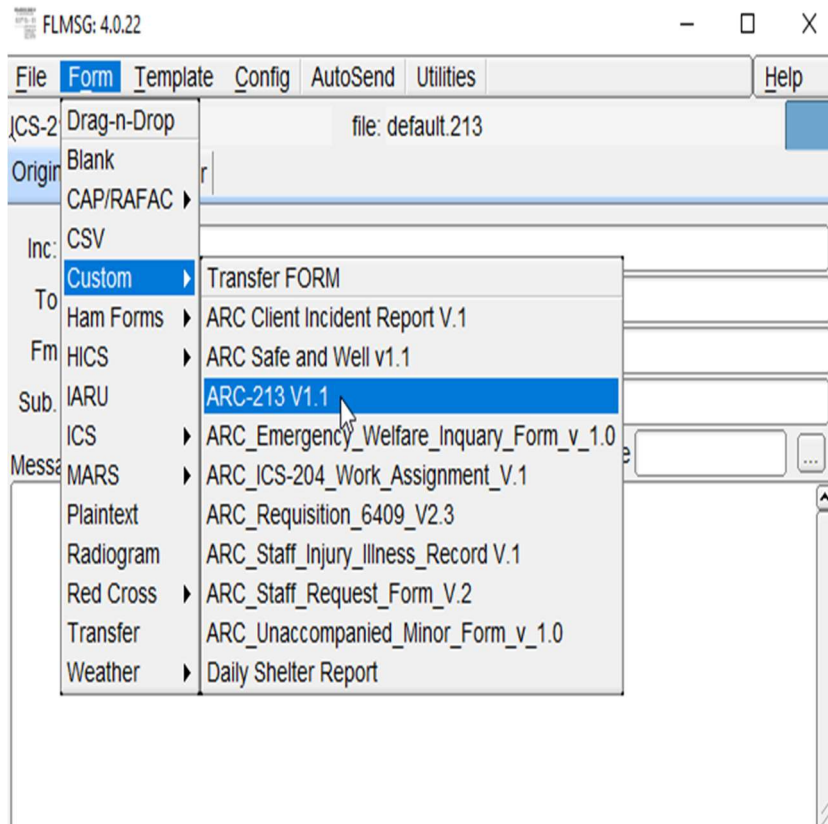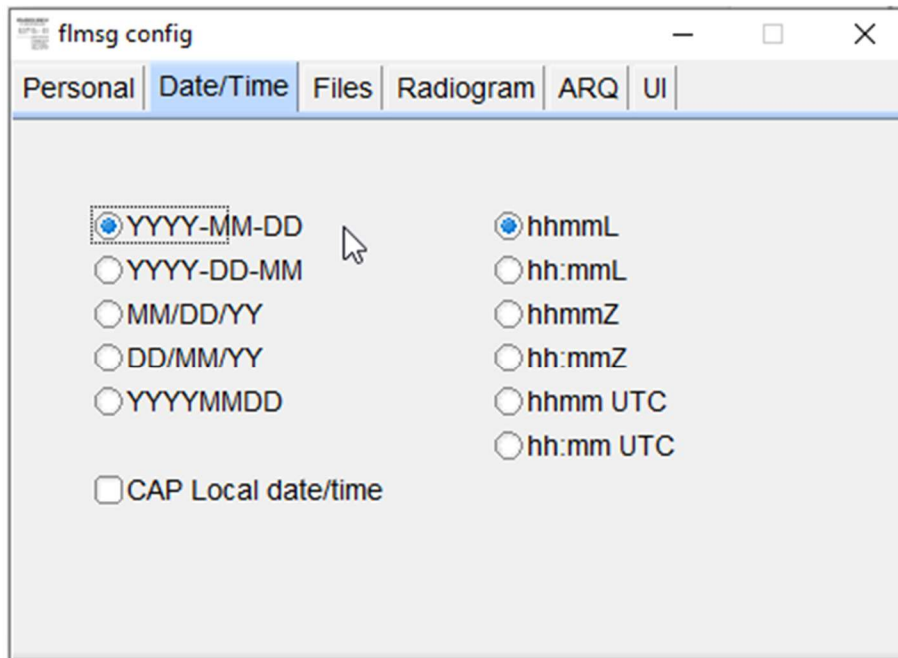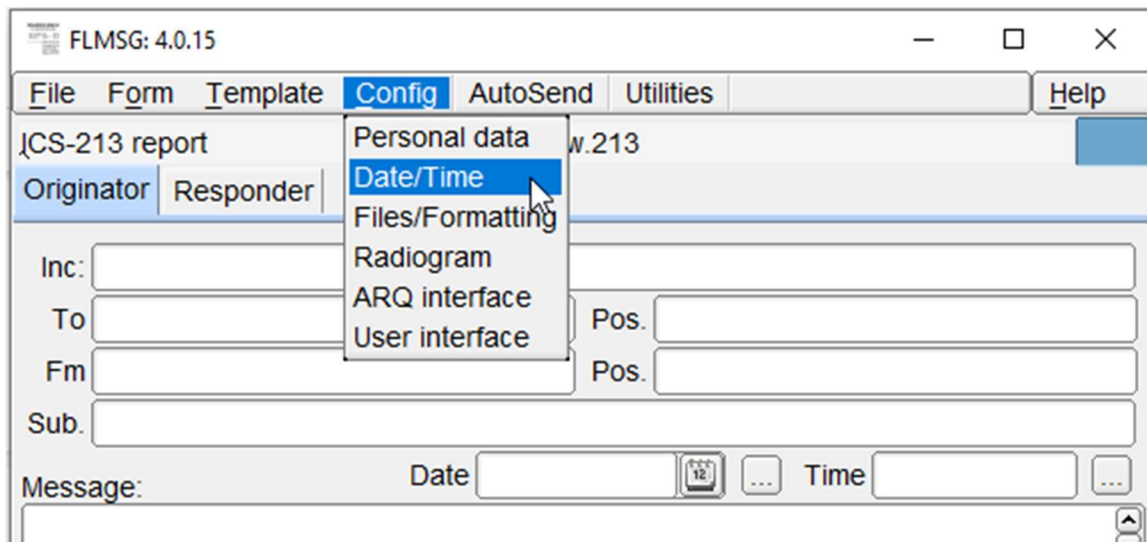
9. You will need to manually move them into the Custom folder, which is a
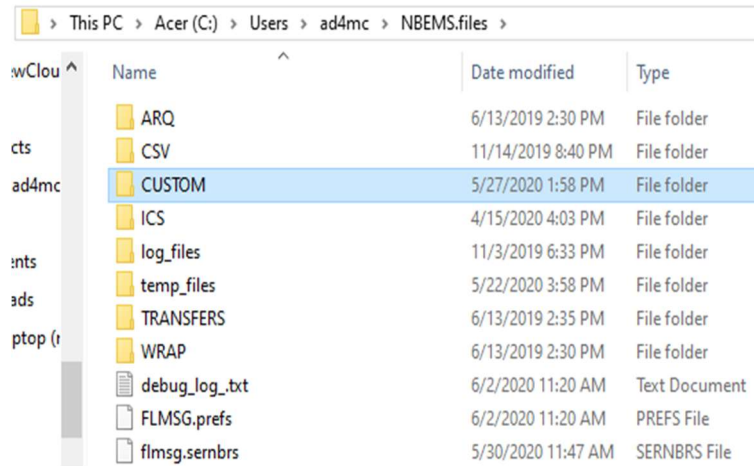
10. Once moved into the Custom Form folder, they can be opened from flmsg, Form

11. Set the Date/Time format to YYYY-MM-DD and hhmmL ("L" is for Local time). Click on configure, date/time and select proper setting.

12. Enter the information into the form. **See Templates farther on in instructions.** Note that the Current Date and Local Time in 24-hour format can be entered by clicking on the boxes with "..." (highlighted in orange boxes).
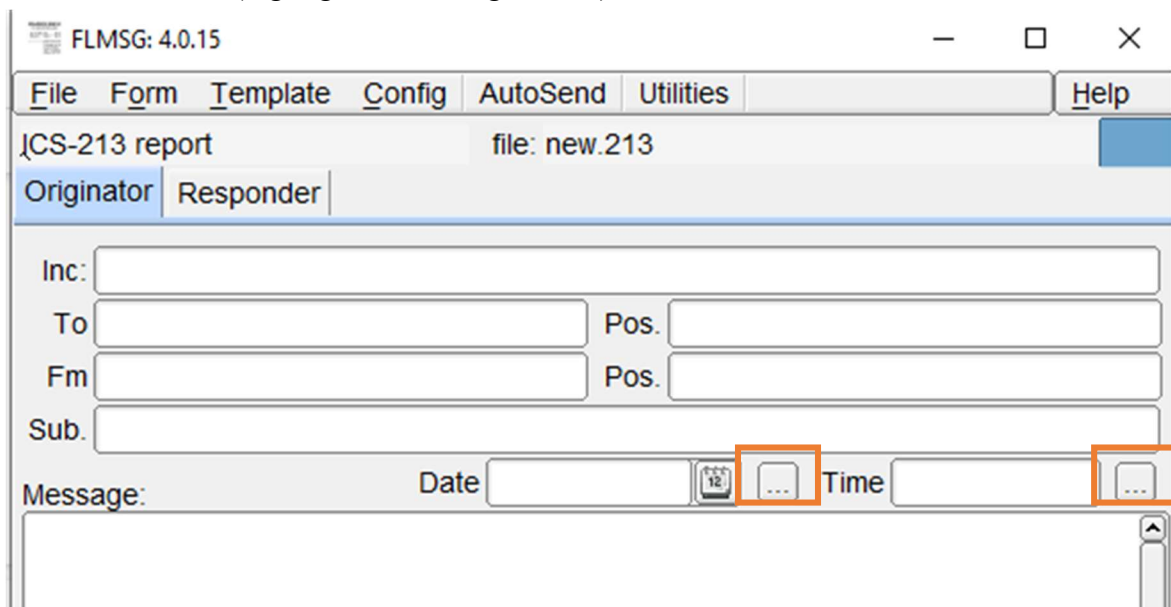
13. To ensure that fldigi and flmsg are in the same mode, click on Config, ARQ interface, CHECK and verify that Sync modem to fldigi box is checked. Accept default values for other fields.
NOTE: You may now have to UN-check "Change modem with auto send" for Auto send to work. Open fldigi BEFORE you open flmsg so that flmsg can sync to fldigi.
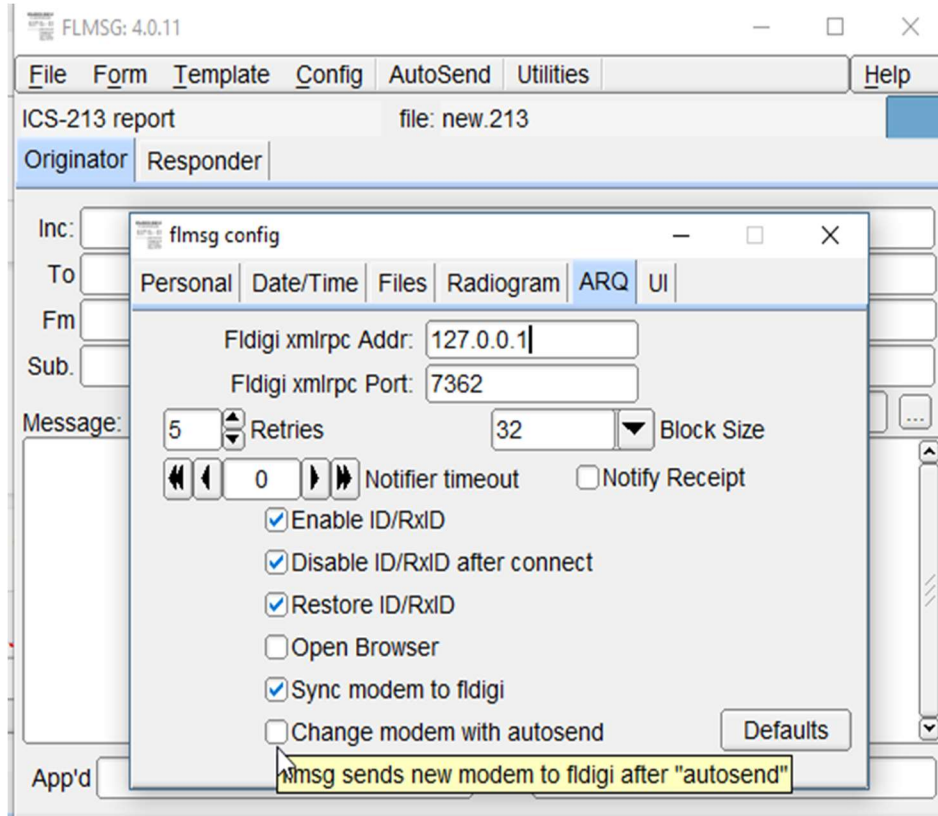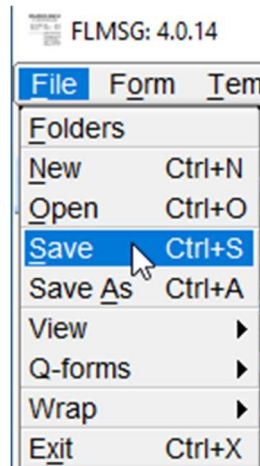

14. NOTE: BEFORE SENDING A MESSAGE, VERIFY THE MT63-1KS MODE;
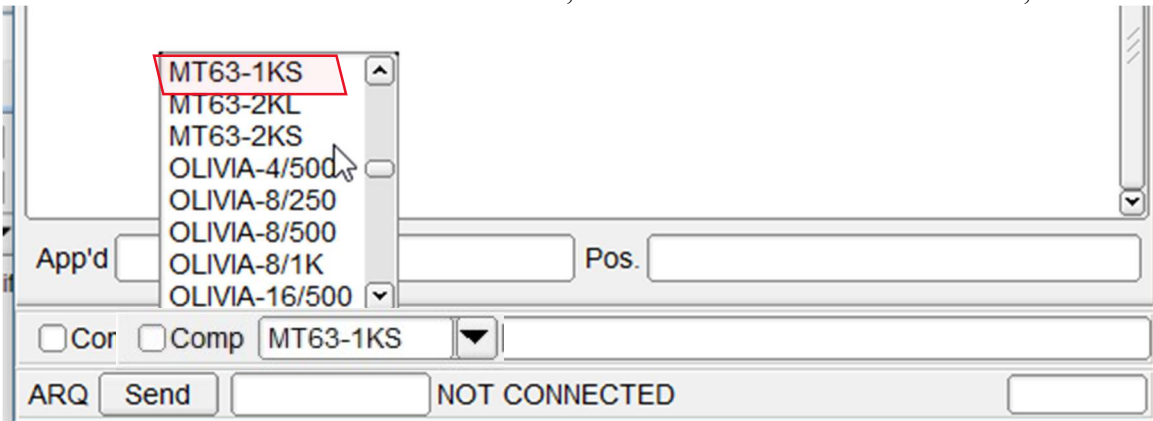

15. Update the Time, as shown in step 12.

16. Click File, Save. This adds your call sign to the transmitted message file name. It is preferred to **NOT USE "Save As"**, because this replaces your callsign as the default prefix to the file name.

17. Then Transmit the message form by clicking Auto Send

18. Note: It is possible to not to be able to use Auto Send until you disabled the Zone Alarm Firewall. *We do not recommend the disabling of any firewall*. For the particular firewall that you are using, there should be a firewall setup change to allow Flmsg to call Fldigi to send your message, but the method to do that is beyond the scope of this training.

19. You will be asked for a place to save the Form file. Accept the default folder *(HIGHLY Recommended)*.
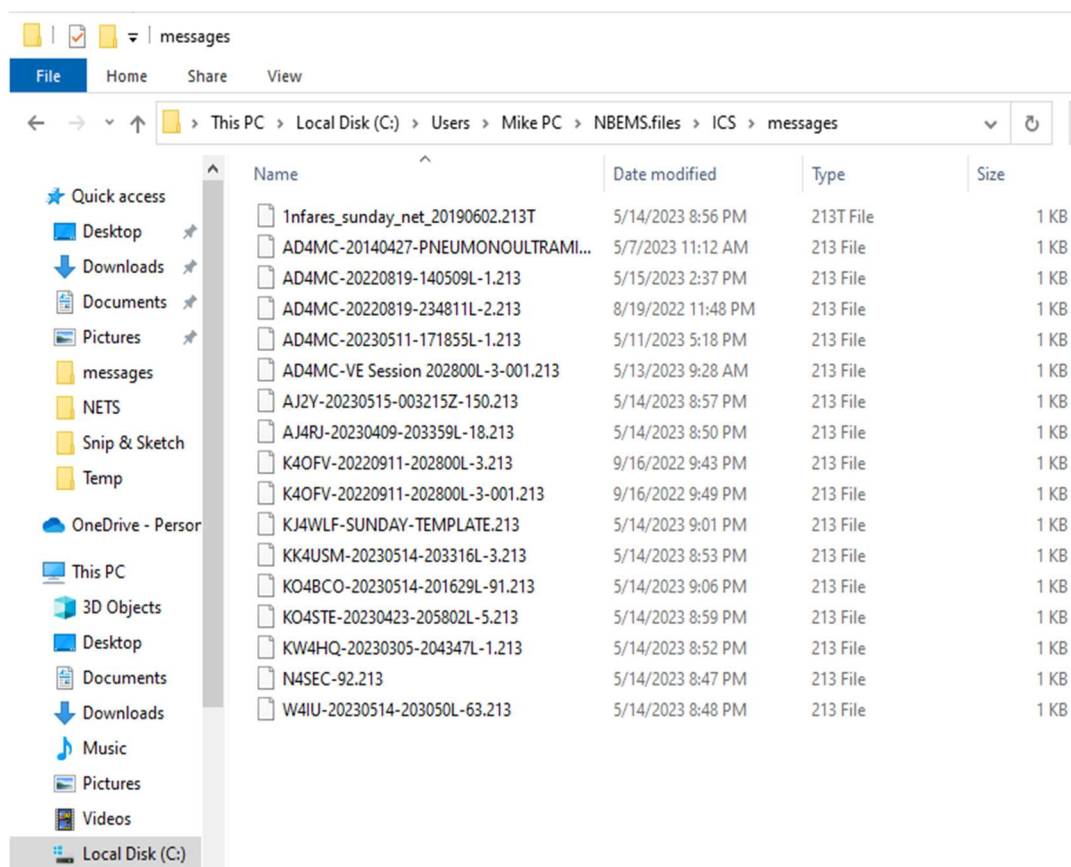
20. To view messages received during a session, click on Utilities, then Received Msgs.
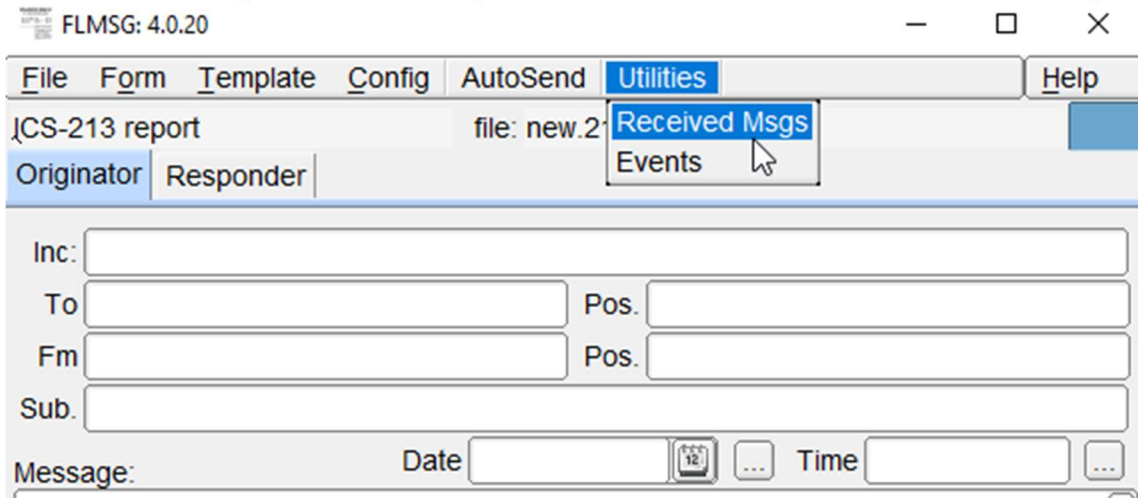
You will get another popup called Rcvd Msgs

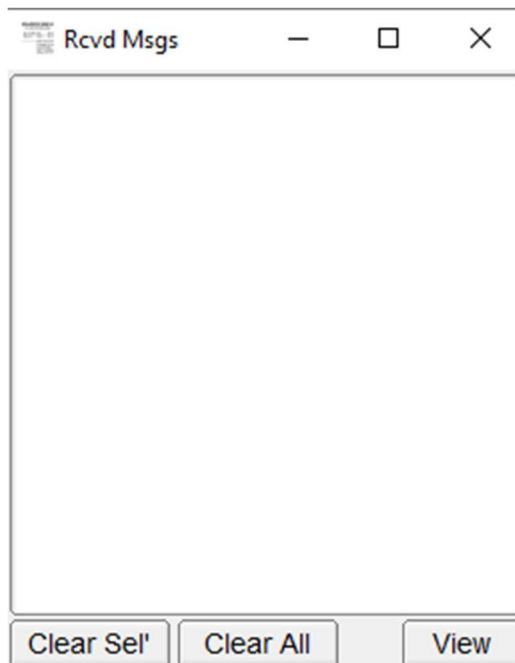Move this to a convenient position on your screen. As you receive messages, they will be listed in the popup. Left click to select the message that you would like to view and click View on the bottom right of the popup.

(NOTE: After creating a message, click File - Save. Do not "Save As" or you will lose your callsign prefix in the file name as happened above in the "1nfares…." file)

21. **All** messages are automatically saved and all messages, both sent and received from the current and previous sessions can be opened and viewed by clicking on Files, Open.

22. The receiving station should see the following in their Fldigi screen like the one below:
Note that the <NUL> problem we had been experiencing, as shown above, was found by Wayne,
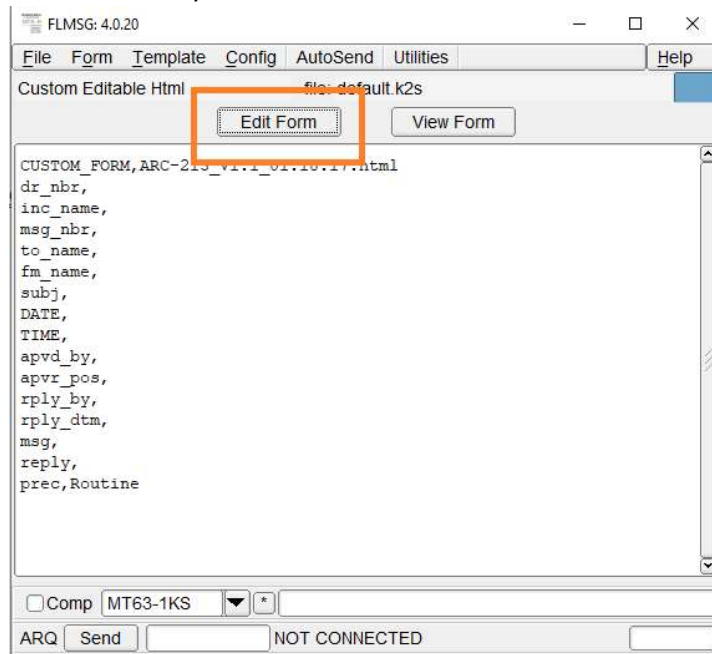KG5WU, to be a setting error. See page 15, for the setting that corrects this problem.

```
<SYN><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><N
UL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL>... start
[WRAP:beg][WRAP:lf][WRAP:fn AD4MC-20130711-190038Z-6.213][flmsg]1.1.32
:hdr_fm:21
AD4MC 20132407234126
:hdr_ed:21
AD4MC 20132307020219
<ics213>
:to:14 KK4IZN - James
:p1:36 Sandy Springs Shelter - Brandon Hall
:fm:13 KG5WU - Wayne
:p2:29 Sandy Springs Fire Station #3
:d1:10 2013-10-05
:t1:5 0959L
:sb:10 NFARES SET
:s1:13 KG5WU - Wayne
:p3:29 Sandy Springs Fire Station #3
:mg:99 THIS IS ONLY A DRILL

DO YOU HAVE THE CAPACITY TO RECEIVE ANOTHER 50 VICTIMS?

THIS IS ONLY A DRILL
[WRAP:chksum 960A][WRAP:end]
... end
<NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><N
UL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL><NUL>
```

23. Then the ICS-213 form. ********** EXAMPLES **********

FLMSG: 4.0.20

File Form Template Config AutoSend Utilities   Help

ICS-213 report   file: W4RZ-DTN-CK-IN.213

Originator | Responder

Inc: GA ARES DTN (EXCERISE)

To KX4MAT   Pos. NCS

Fm W4RZ   Pos. STA OP

Sub. CHECK IN FOR 12/17/23 DTN

Message: Date 2023-12-17   Time 1610L

```
Please check in W4RZ, Kory, Heard County, W. Central Dist #4. On
AUX power.

73'S
Kory
```

App'd Kory W4RZ   Pos. Sta Op

☐ Comp MT63-1KS ▼ * 427 bytes / 50 secs

ARQ Send   NOT CONNECTED

24. To use or send the Red Cross ICS-213 form, like in step 10 of this section. Once you click on the form you get the pop-up screen seen below. Click on Edit Form. This will open a new window in your default internet browser.


This form can be filled in by the user, then click on submit form at the bottom.

Once you are filling it out and it submit, the pop up from earlier is now filled in and ready to send.
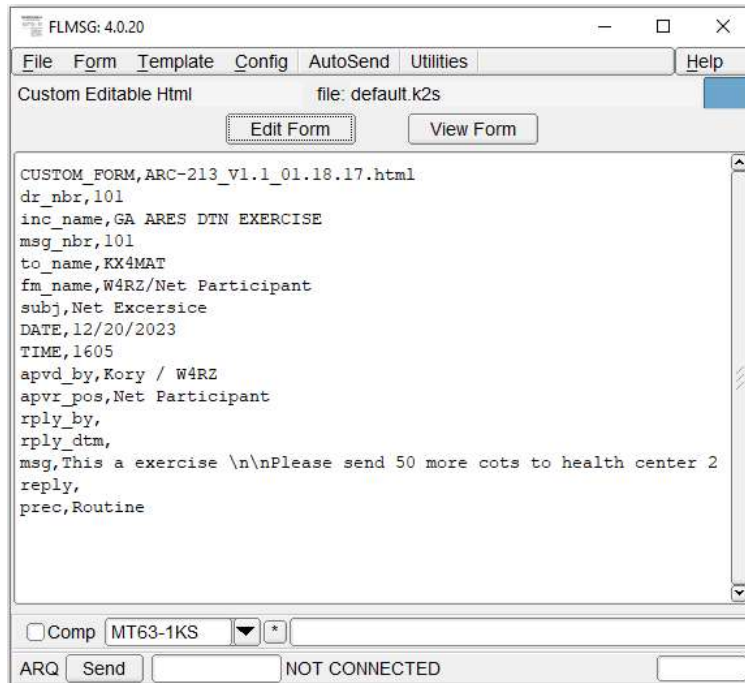

25. **Message Forwarding:** Wayne, KG5WU, noticed during an NFARES meeting, that we may have a need to relay messages when a receiving station is out of range of a sending station, particularly when using simplex. Fortunately, the flmsg design team provided a method of forwarding messages without the need to make any changes and while providing a documented recording of the callsigns of the relaying station(s). Per KG5WU's training, For a message received in the current session, View it, then do a File, Save (Not a Save as), then Auto Send.

26. To recover a received message that needs to be relayed, click on FLMSG, File, Folders
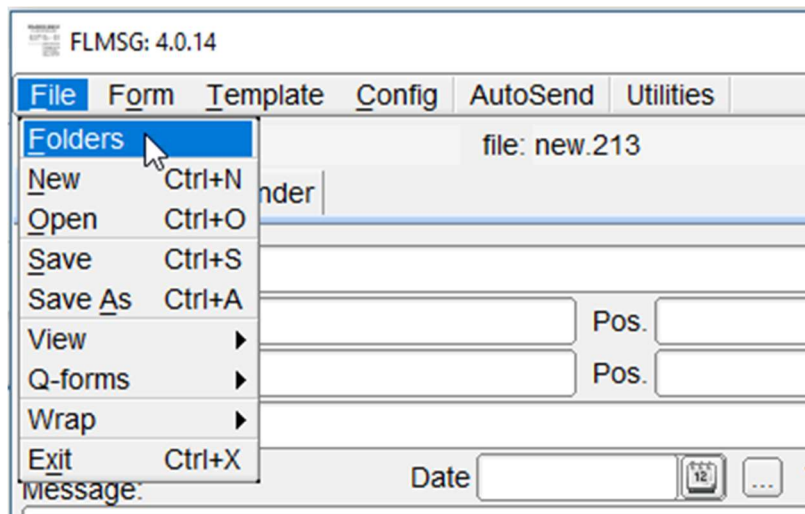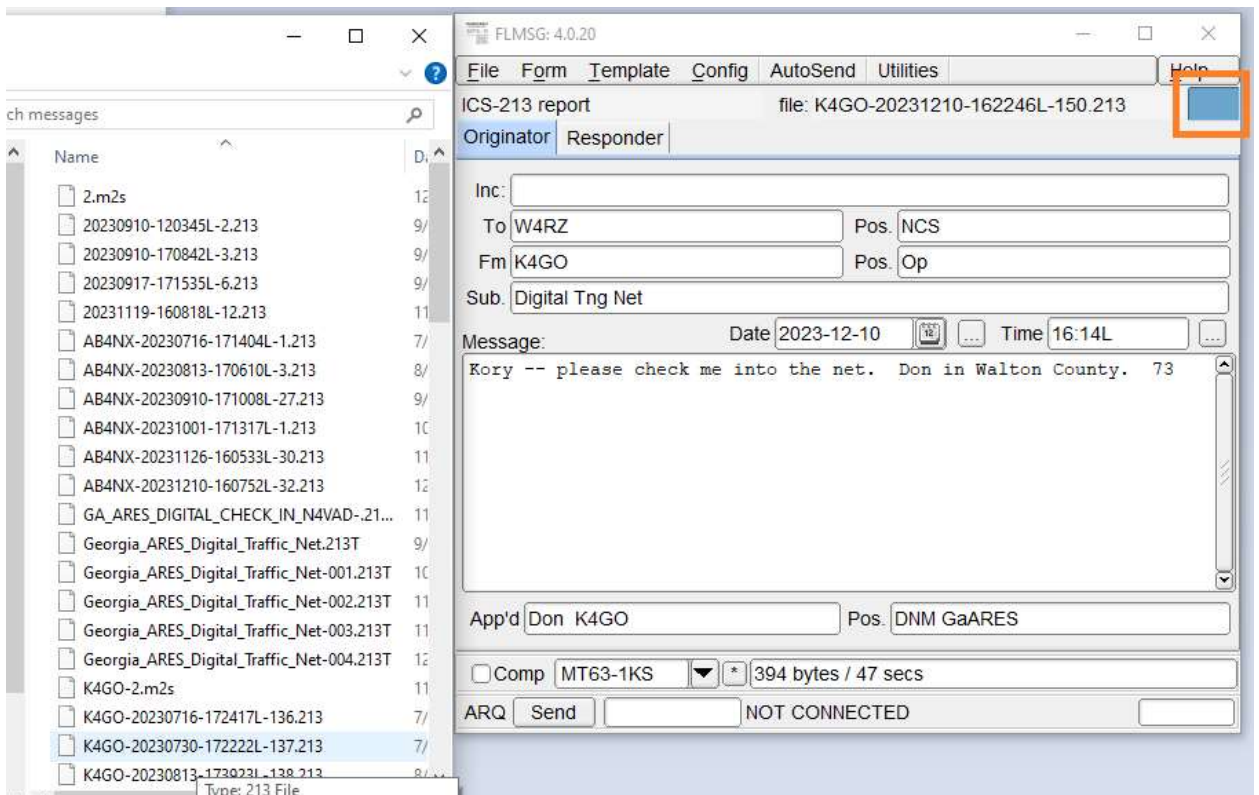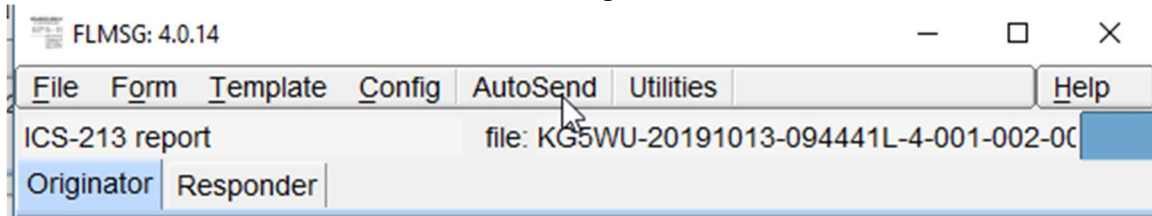
Double click on ICS
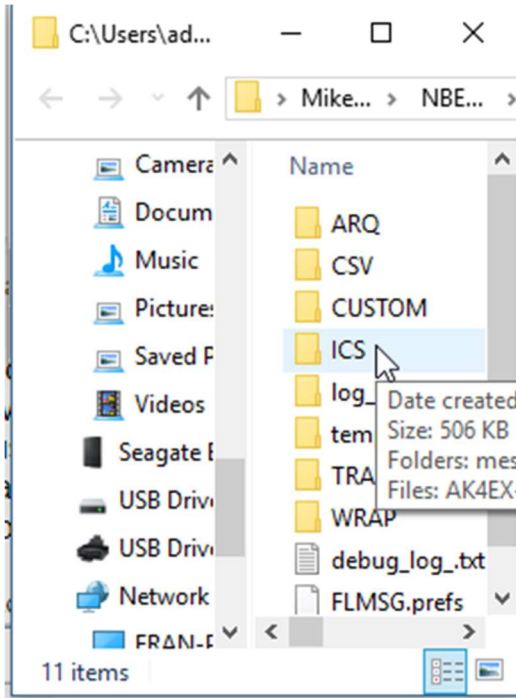
Double click on messages.
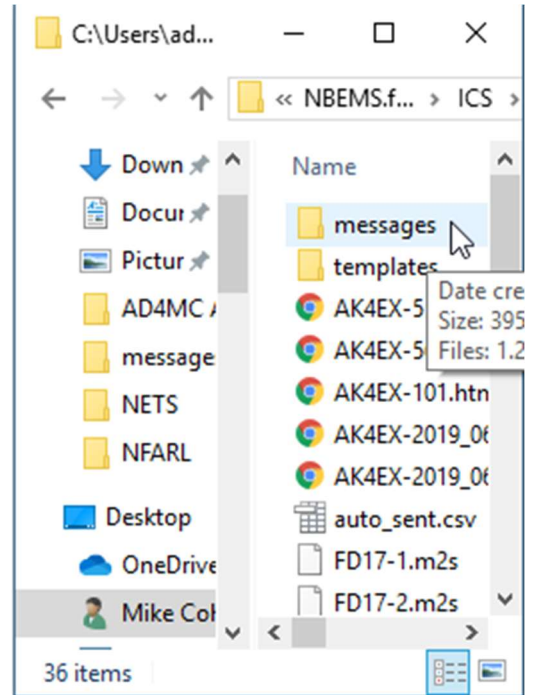
27. Single left click and hold to drag this specific message to be relayed up to the blue box
below the word Help on the FLMSG window

28. You can now relay the message by left clicking on Auto Send as you would for a typical message.
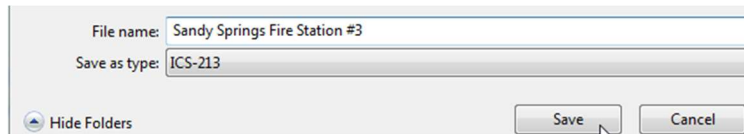

****** Templates ******

Templates enable you to pre-set up your ICS-213 Forms with all the data that will be repeated in each message.

1. Fill in an ICS-213 Form with the information that will be used in every message that you will be using during the activity. A "Time" is entered in the 24-hour Local formal as a reference, but **it must be edited for each message just before it is sent**.   See section #23 (under Templates) as an example of a completed form.

2. Click Template, Save As
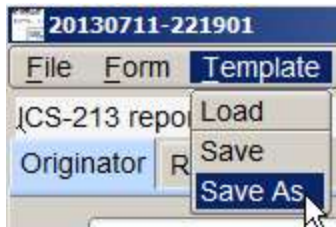
3. Use the default file name or create your own, like "Sandy Springs Fire Station #3" and

4. click Save
5. Whenever you want to create a new message, start with this "template" (master ICS-213 form).

6. From the ICS-213 form, click Template, Load

7. **Double click** on the desired Template file
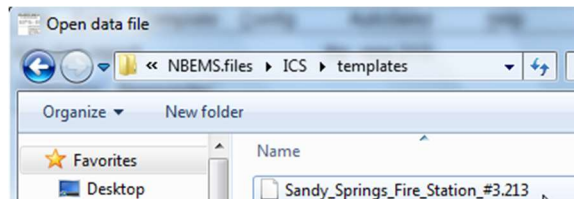
8. Your master file will be opened, and you can then enter the additional message information.
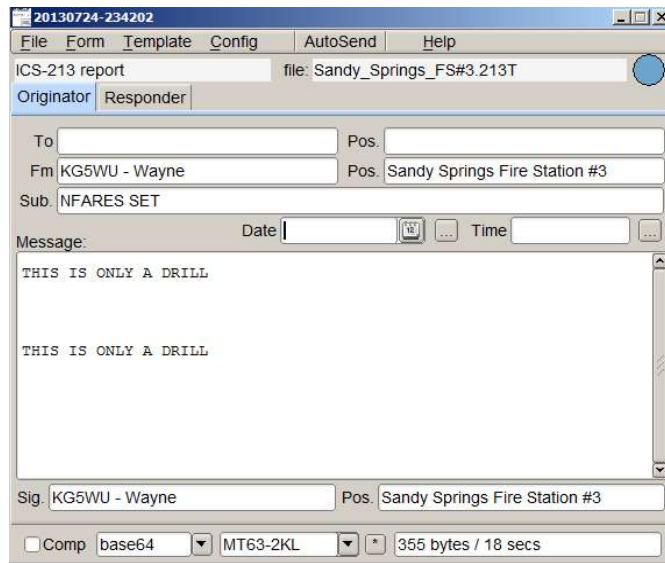
!!! Update the Time before sending it **!!!**

Thanks to Mike AD4MC, for all the information he provided!!!

Contact Kory, W4RZ, W4RZ@W4RZ.COM with any questions or comments.