

Wyandotte County RACES Digital Communications

I. **PURPOSE:**

The purpose of this document is to establish the Standard Operating Guide (SOG) for Wyandotte County RACES Digital Communications. The program used is FLDigi and the interface between the computer and radio is the Signalink unit. This SOG shows the basic setup and operation of for sending and Receiving ICS-213 Forms. The operation mode in this document is MT63-2KL.

II. **KEY WORDS:**

FLDigi, Signalink, ICS-213.

III. **DEFINITIONS AND SPECIFICATIONS:**

FLDigi – Program used for Amateur Radio Digital Communications.

Signalink USB – Device interfacing the computer to the radio

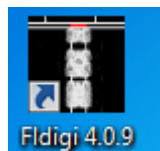
ICS-213 – General Message Form

IV. **DOCUMENTS:**

FLDigi, FLMsg, and FLWrap help and manual files. This files can be downloaded from <https://sourceforge.net/projects/fldigi/>.

V. **FLDIGI Installation and Configuration.**

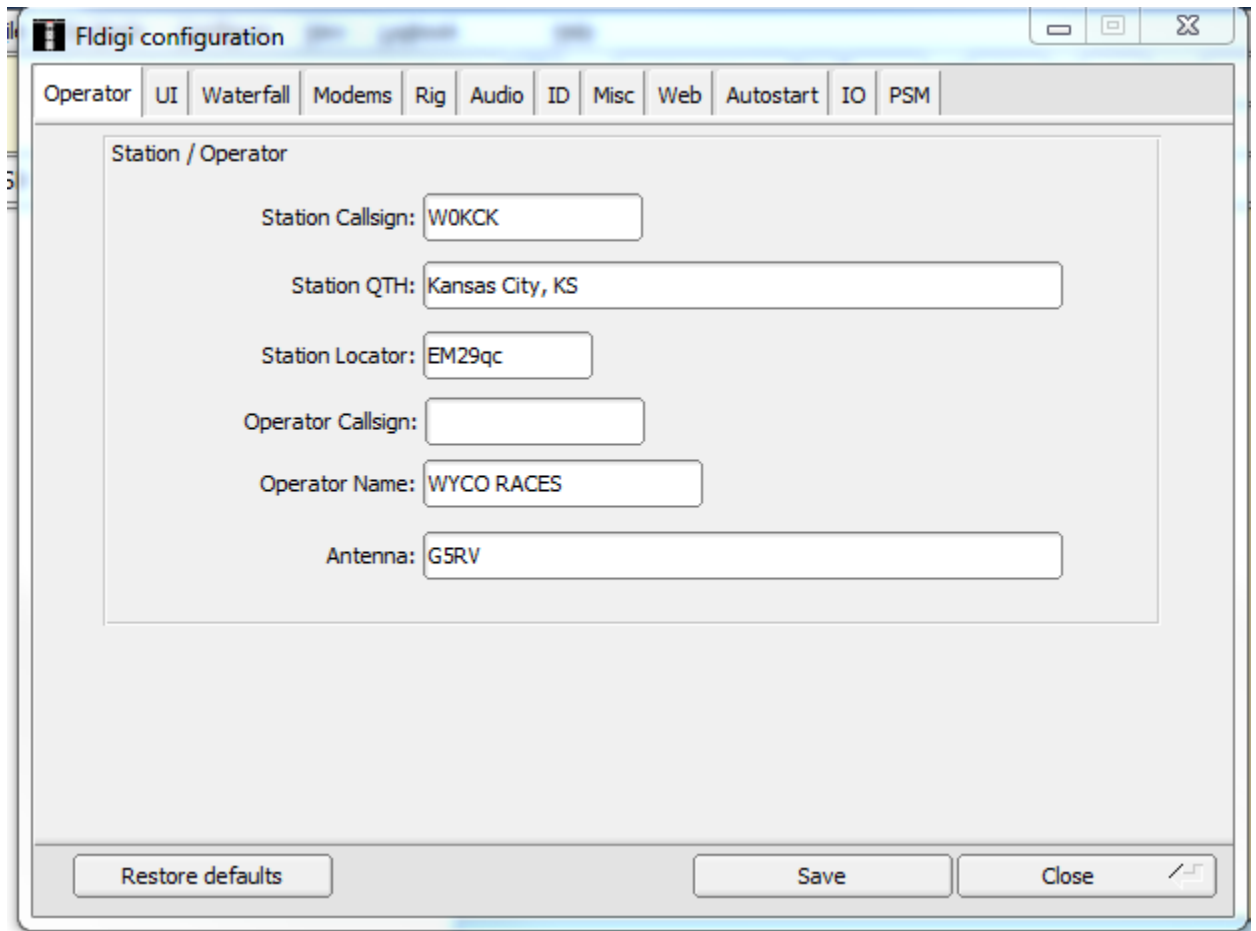
1. If this is the first time using the Signalink interface perform the following to download the Signalink CODEC drivers into the computer.
 - a. Connect the Signalink USB cable to the Signalink unit and the computer.
 - b. Press the signalink power button to on.
 - c. The drivers should automatically load from the Signalink to the computer.
2. Download the following files from www.sourceforge.net.
 - a. fldigi-X.X.X_setup.exe (X = software version numbers)
 - b. flmsg-X.X.X_setup.exe
 - c. flwrap-X.X.X_setup.exe
3. For the three downloaded files perform the following:
 - a. Double click on fldigi-X.X.X_setup.exe and follow the installation instructions.
 - b. Double click on flwrap-X.X.X_setup.exe and follow the installation instructions.
 - c. Double click on flmsg-X.X.X_setup.exe and follow the installation instructions.Quickstart icons for each program will appear in on the Windows Desktop
4. Start FIDigi by clicking on the FIDigi Start ICON.



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5. Operator Information

- a. If this is the first FIDigi installation on this computer the Operator information window should automatically appear.
- b. If not and the main FIDigi window appears then click on the Configure pull down menu, then select Miscellaneous, then select Misc. the Fldigi configuration window will appear. Select the Operator tab on the top left corner of the window. The Operator window will appear.



The screenshot shows the 'Fldigi configuration' window with the 'Operator' tab selected. The window contains several text input fields for station and operator information. The fields are labeled as follows:

- Station Callsign: W0KCK
- Station QTH: Kansas City, KS
- Station Locator: EM29qc
- Operator Callsign: (empty)
- Operator Name: WYCO RACES
- Antenna: G5RV

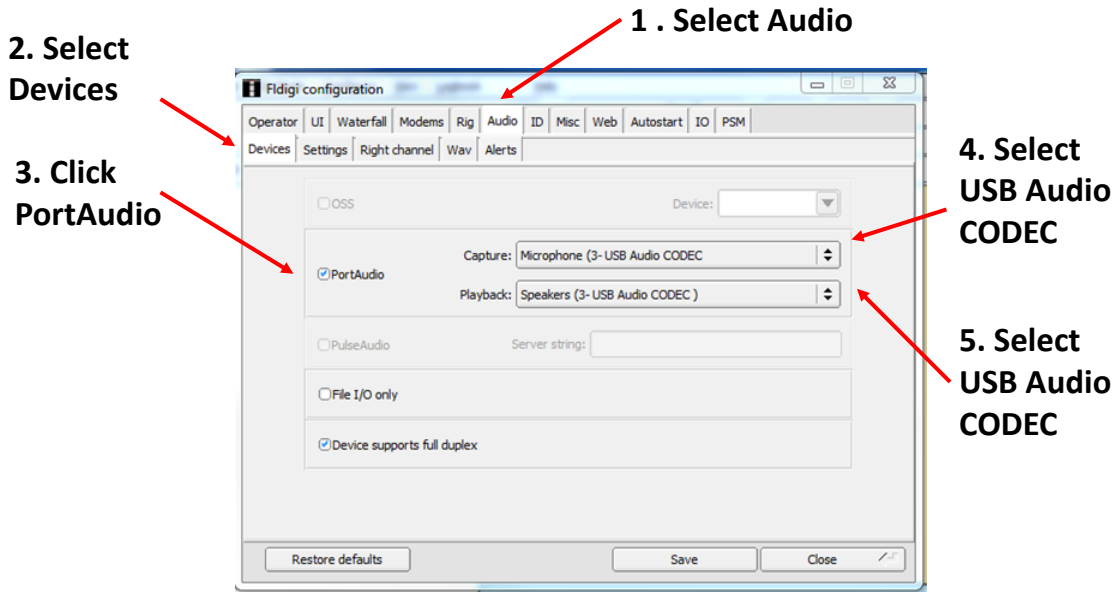
At the bottom of the window, there are three buttons: 'Restore defaults', 'Save', and 'Close'.

- c. Enter the information listed in the Operator window. The minimum information to enter is the Station Callsign.
- d. Click Save then Close .

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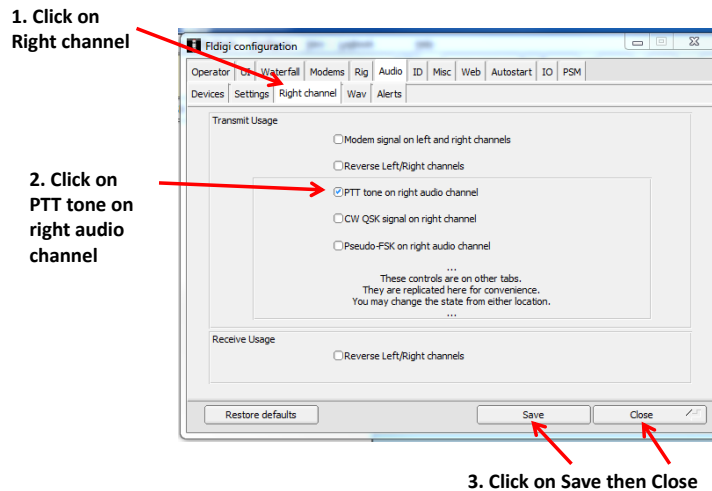
6. Audio Configuration

- a. Click on the FIDigi Configure pull down menu then click on Sound Card.



- b. In the Devices section click PortAudio and select USB Audio CODEC in both the Capture and Playback.

- c. Next Click on the Right Channel tab.

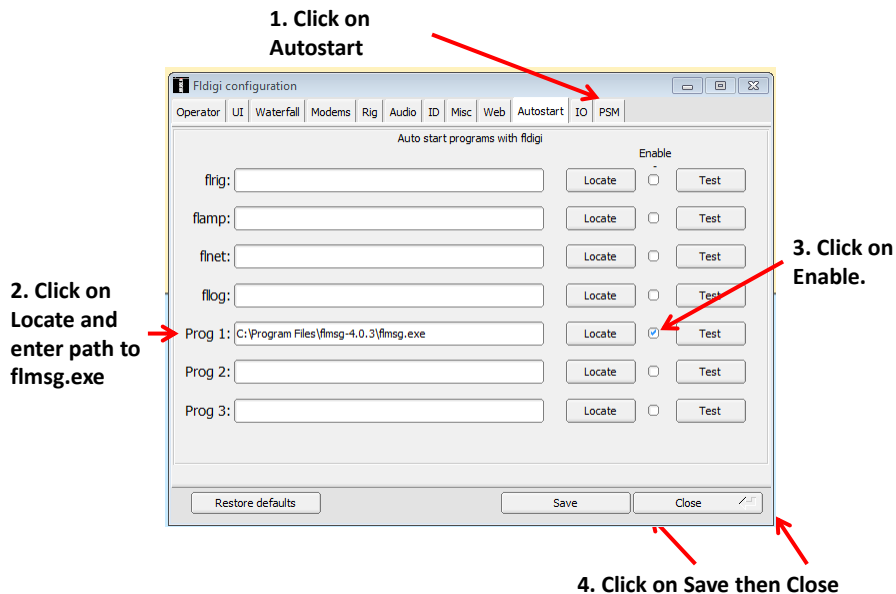


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- d. Click PTT tone on right audio channel.
- e. Click Save then Close .

7. FIMsg Auto Start.

- a. In the FIDigi Configure pulldown menu click on Miscellaneous then click on Misc.
- b. In the Fldigi configuration window click on the Autostart Tab.

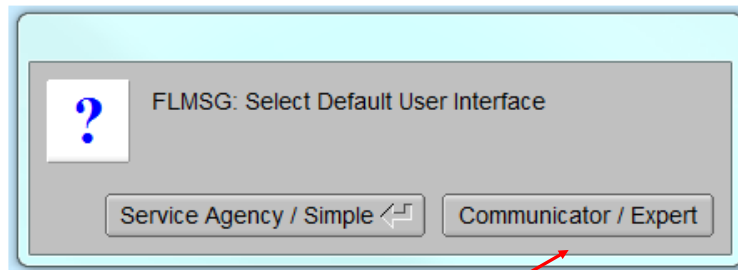


- c. Click on the Locate button next to Prog1:. Locate the FIMsg.exe file. It is normally located at c:/Program Files/flmsg-X.X.X/ flmsg. Click on the flmsg file then click the OPEN button. The path to FIMsg would appear in the Prog1 section.
- d. Next click in the Enable box located between the Locate and Test buttons.
- e. Click Save and Close.

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VI FIMsg Setup

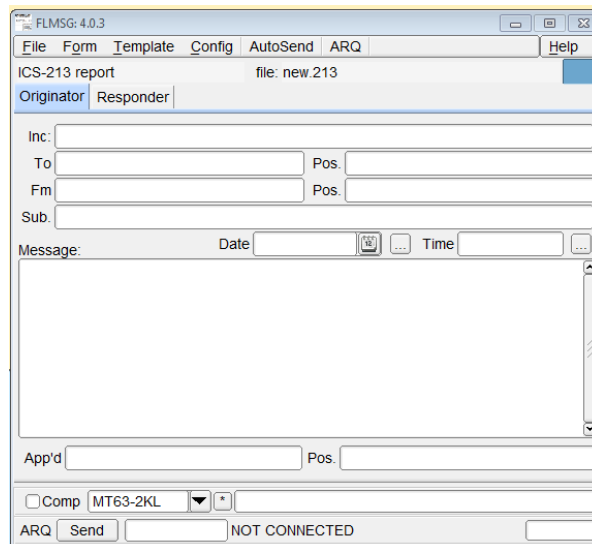
1. Close and then restart the FIDigi Program. After the FIDigi program starts the FIMsg program will automatically start.
2. If this is the first time starting FIMsg then the FLMSG: Select Default User Interface window will open.



Click on Expert

3. Click on the Communicator / Expert button.
4. In the FIMsg window click on the Config tab

Click on Config



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5. Next select Personal Data.

flmsg config

Personal | Date/Time | Files | Radiogram | ARQ | UI

Call: W0KCK

Tel: 913-573-6359

Name: Wyandotte County RACES

Addr: 401 N 7th St. RM BN-20

City/St/Zip: Kansas City Kansas 66101

Email addr: leker@wycokck.org

6. Complete the information in the Personal window. The minimum entry is the Call:

7. Next click on the ARQ Tab.

1. Click on ARQ

flmsg config

Personal | Date/Time | Files | Radiogram | ARQ | UI

Fldigi xmlrpc Addr: 127.0.0.1

Fldigi xmlrpc Port: 7362

Retries: 5 Block Size: 32

Enable ID/RxID

Disable ID/RxID after connect

Restore ID/RxID

Open Browser

Sync modem to fldigi

Change modem with autosend

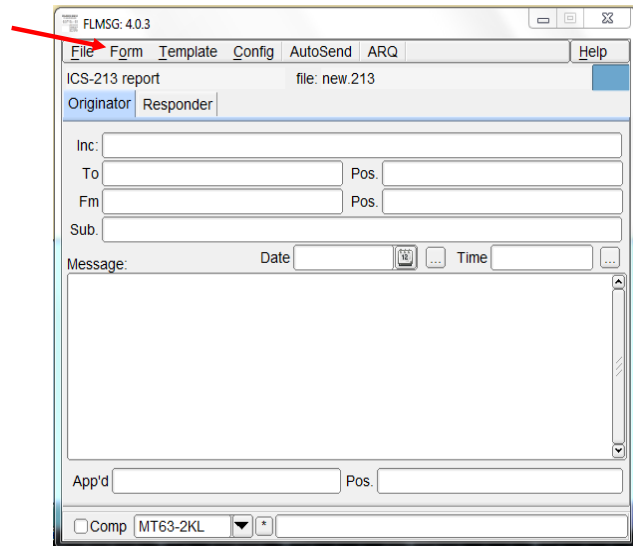
Defaults

2. Click on Open Browser

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- Click to select Open Browser.
- This completes the basic FLMsg. Close FIMsg config window by clicking on the X in the top right corner.
- Select the ICS-213 form by clicking on the FIMsg Form tab, slide down to ICS, then select ICS-213. The ICS213 Form should appear.

**In Forms Select
ICS-213**



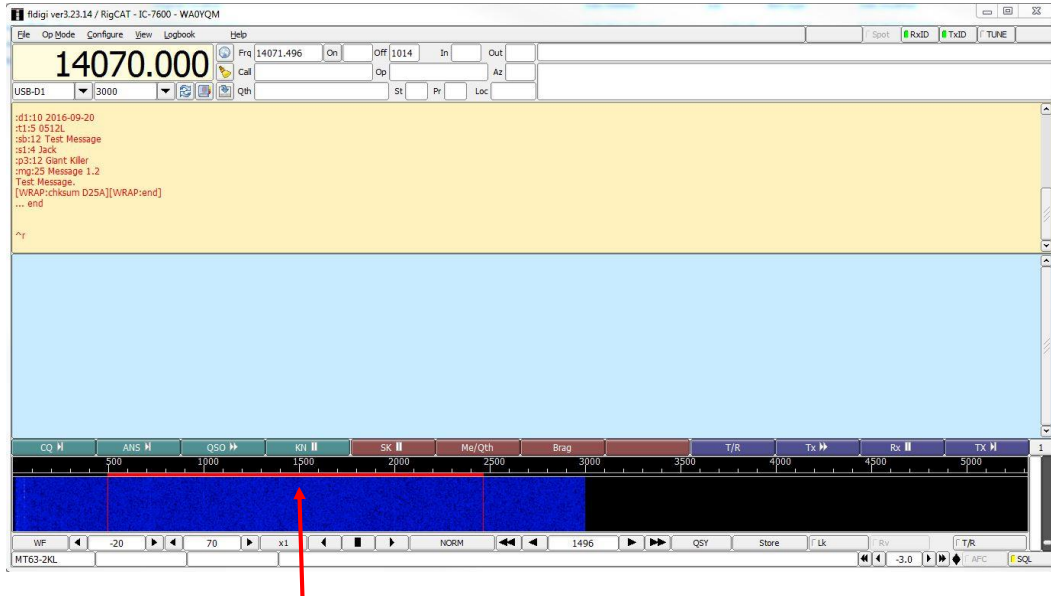
Select MT63-2KL

- Click on the arrow at the bottom of the form and select MT63-2KL.

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VII OPERATIONS:

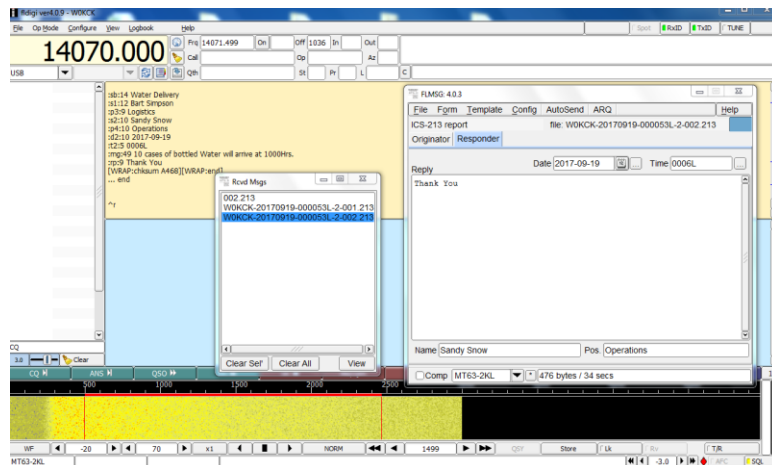
1. Verify that the transceiver is on the correct frequency.
2. Start FLDIGI. FLMSG will also start
3. Select the op mode to MT63-2000L
4. Center the operation to 1500.



Center to 1500

You are now set to transmit and receive digital documents.

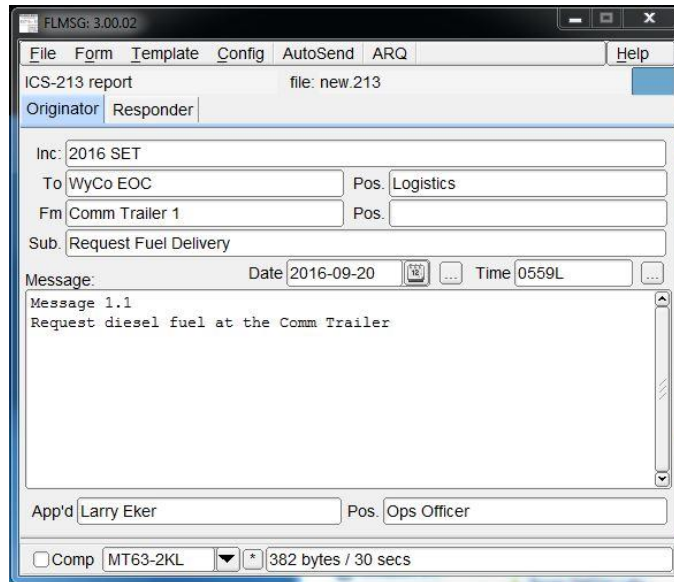
5. In a single monitor setup recommend arranging FLDIGI, FLMSG and Rcvd Files as follows.



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If Rcvd Files window is not shown, in the FLMSG window click on the ARQ pull down then click on Received Files.

6. In FLMSG ICS 213 form enter the message information.



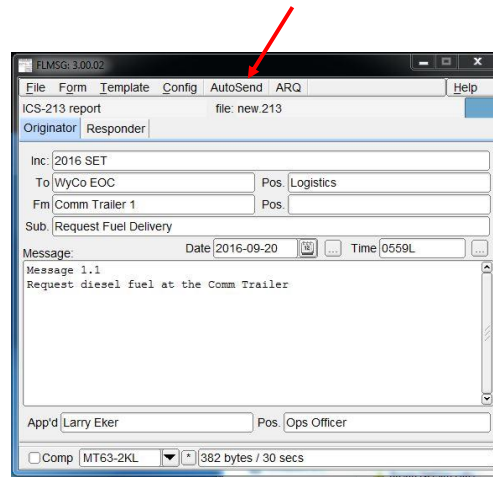
The screenshot displays the FLMSG 3.00.02 software window. The menu bar includes File, Form, Template, Config, AutoSend, ARQ, and Help. The title bar shows 'ICS-213 report' and 'file: new.213'. Below the menu bar are tabs for 'Originator' and 'Responder'. The form contains the following fields:

- Inc: 2016 SET
- To: WyCo EOC (Pos: Logistics)
- Fm: Comm Trailer 1 (Pos:)
- Sub: Request Fuel Delivery
- Message: Date 2016-09-20 (Time 0559L)
- Message 1.1
Request diesel fuel at the Comm Trailer
- App'd: Larry Eker (Pos: Ops Officer)
- Comp: MT63-2KL (382 bytes / 30 secs)

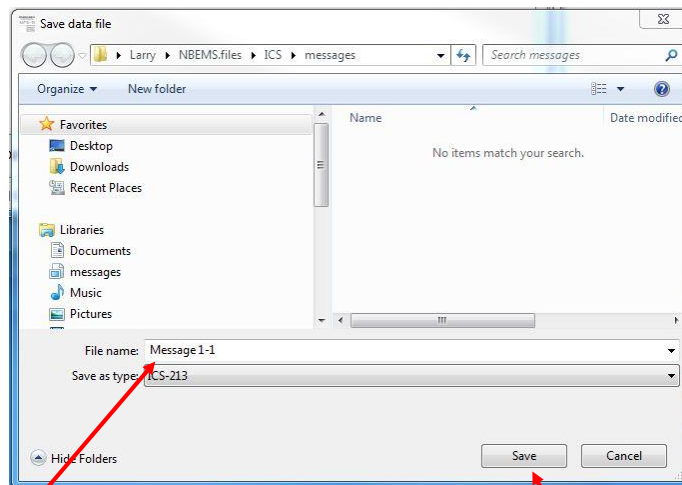
7. Contact the receiving station via voice and ask if they are ready to receive digital traffic. When the receiving station is ready then proceed with step 8.
8. To start the transmission process press AutoSend

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Press AutoSend



9. FLMSG will ask for a file name to store the message. Enter an appropriate file name so the file can be retrieved if necessary.

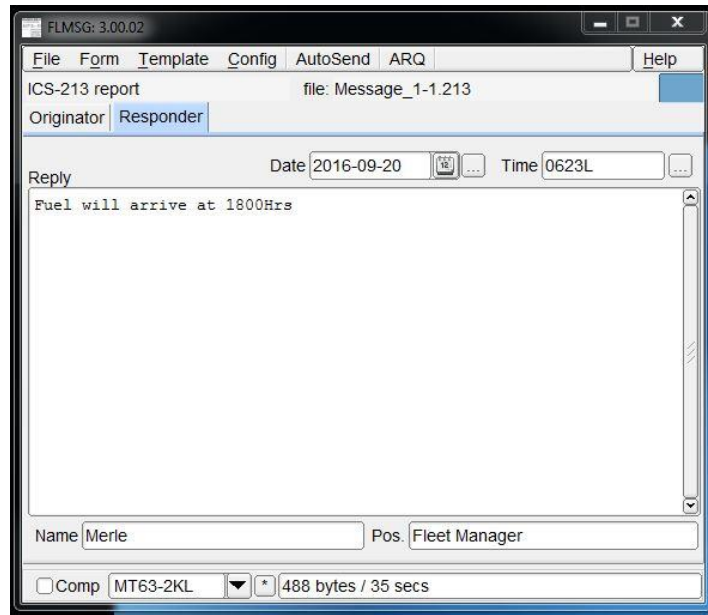


Enter File Name

Then press Save

8. Then press Save. The message will now be sent.
9. To respond to a message, press Responder Enter the Message. Contact the receiving station via voice and ask if they are ready to receive digital traffic. When the receiving station is ready then proceed by pressing AutoSend.

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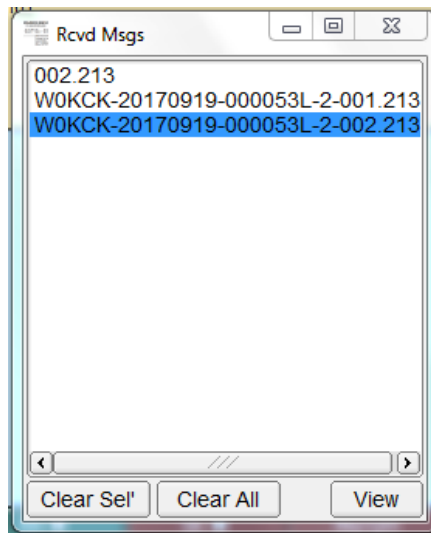


10. The response will be sent.

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VIII RECEIVING A FILE.

1. After receiving file the file will appear in the Rcvd Files window.
2. To view the file, click on the file name in the Rcvd Files window then click on the VIEW button.



3. Two actions will automatically take place.
 - a. First the IC213 form will be populated with the file information.
 - b. Second the browser will automatically open with the the IC213 Form. The form should be printed from the browser and then close the browser.

The screenshot shows a web browser window with the address bar displaying 'C:\Users\Administrator\BREM5 Files\IC213\002.html'. The browser title is '002'. The main content area displays a form titled 'GENERAL MESSAGE (ICS-213)'. The form has the following fields:

1. Incident Name (optional):	
2. To (Name and Position): John Smith	Logistics
3. From (Name and Position): John Doe	Operations
4. Subject : Tools Needed	5. Date : 2017-09-18 6. Time 2341L
7. Message :	
We need 64 shovels and 1 rake.	
8. Approved by: Name : John Smith	Signature : _____
	Position/Title : Logistics
9. Reply :	
Can send 1 shovle and 60 rakes	