#### 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 <u>www.sourceforge.net</u>.

- 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 clock 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 FlDigi by clicking on the FlDigi Start ICON.



- 5. Operator Information
  - a. If this is the first FlDigi installation on this computer the Operator information window should automatically appear.
  - b. If not and the main FlDigi 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.

perator UI Waterfall Modems Rig Audio ID Misc Web Autostart IO PSM	
Station / Operator	
Station Callsign: W0KCK	
Station QTH: Kansas City, KS	
Station Locator: EM29qc	
Operator Callsign:	
Operator Name: WYCO RACES	
Antenna: G5RV	

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

- 6. Audio Configuration
  - a. Click on the FlDigi Configure pull down menu then click on Sound Card.

2. Select				1 . Select	Audio	
Devices	Fldigi	i configuration	Madama Dia Audi			
3. Click	Devices	Settings Right	channel Wav Alert	s		4. Select
PortAudio		oss		Device:		USB Audio
		PortAudio	Capture: Playback:	Microphone (3- USB Audio CODEC Speakers (3- USB Audio CODEC )		
				Server string:		5. Select
		□File I/O on	у			
		Device sup	ports full duplex			CODEC
	F	lestore defaults		Save	Close /	

- 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.

1. Click on Right channel	Ridigi configuration	
2. Click on – PTT tone on right audio	Operator         Dot         Waterfail         Modems         Rig         Audio         ID         Misc         Web         Autostart         IO         PSM           Devices         Settings         Right channel         Way         Alerts         Interview         Interview </th <th></th>	
channel	Restore defaults	)

3. Click on Save then Close

- d. Click PTT tone on right audio channel.
- 7. FlMsg Auto Start.
  - a. In the FlDigi Configure pulldown menu click on Miscellaneous then click on Misc.
  - b. In the Fldigi configuration window click on the Autostart Tab.

	1. Click on Autostart			
	Fldigi configuration Operator UI Waterfall Modems Rig Audio ID Misc Web Autostart IC	O PSM		
	Auto start programs with fidigi	Er	nable	
	firig:	Locate		
	flamp:	Locate	Test	
	finet:	Locate	O Test	3. Click on
2. Click on	flog:	Locate	O Test	Enable.
Locate and enter path to	Prog 1: C: \Program Files \fimsg-4.0.3 \fimsg.exe	Locate	Test	
flmsg.exe	Prog 2:	Locate	Test	
	Prog 3:	Locate	Test	
	Restore defaults Save		Close <	_
		4. Click	on Save the	n Close

- c. Click on the Locate button next to Prog1:. Locate the FlMsg.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 FlMsg whould appear in the Prog1 section.
- d. Next click in the Enable box located between the Locate and Test buttons.
- e. Click Save and Close.

#### VI FlMsg Setup

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



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

Click on Config	
FLMSG: 4.0.3	
File Form Template Config AutoSend ARQ	Help
ICS-213 report file: new.213	
Originator Responder	
Inc:	]
To Pos.	
Fm Pos.	
Sub.	
Message: Date 🔟	Time
	9
	1
	U
	¥
App'd Pos.	
Comp MT63-2KL	
ARQ Send NOT CONNECTED	

5. Next select Personal Data.

flmsg co	nfig 🗖 🖾				
Personal	Date/Time Files Radiogram ARQ UI				
C	call: WOKCK				
•	Tel: 913-573-6359				
Nai	me: Wyandotte County RACES				
Ac	Addr: 401 N 7th St. RM BN-20				
City/St/Zip: Kansas City Kansas 66101					
Email ac	ddr: leker@wycokck.org				

- 6. Complete the information in the Personal window. The minimum entry is the Call:
- 7. Next click on the ARQ Tab.



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

In Forms Select	FLMSG: 40.3
	File Form Template Config AutoSend ARQ
ICS-213	ICS-213 report file: new.213
	Originator Responder
	To Pos.
	Fm Pos.
	Sub.
	Message: Date 🔟 Time
	Comp MT63-2KL 💌 *
	°?
	Select MIT63-2KL

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

#### VII <u>OPERATIONS</u>:

- 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.

igi ver3.23.14 / RigCAT - IC-7600 - WA0YQM			c	- 0
Op Mode _ Configure _ View _ Logbook _ Help	) i Spo	t RxID	TxID [	TUNE
14070.000				
0 2016-09-20 0512L 7EM Message 2 Cant Kiler 15 Message 1.2 Message. Purchisum D25A][VRAP:end] d				
CQ M ANS M QSO ≫ K01 II SK II Me/Qth Brag T/R To	x ₩	Rx 📕	TX	М
		<u>i i i i i i</u>		
4F [4] -20 [▶] 4] 70 [▶] x1 ] 4 [ ■ ] ▶   NORM [44] 4 ] 1496 [▶] ▶▶   QSY [ Store ]]	ſ <b>tk</b>	()	T/R	

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.



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

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

FLN	/ISG: 3.00.02			- 🗆 X
File	Form Template Config	AutoSend A	RQ	[ <u>H</u> elp
ICS-2	13 report	file: new.213		
Origin	nator Responder			
Inc:	2016 SET			
То	WyCo EOC	Pos	Logistics	
Fm	Comm Trailer 1	Pos		
Sub.	Request Fuel Delivery			
Mess	age: Date	2016-09-20	🔟 Time 0559L	
Mess Requ	sage 1.1 Lest diesel fuel at the	Comm Traile	c	
App'	d Larry Eker	Pos.	Ops Officer	
□c	omp MT63-2KL 💌 * 3	82 bytes / 30 s	ecs	

- 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

Press AutoSend	
/	
FLMSG; 3.00.02	□ X
File Form Template Config AutoSend ARQ	Help
ICS-213 report file: new.213 Originator Responder	
Inc: 2016 SET	
To WyCo EOC Pos. Logistics	
Fm Comm Trailer 1 Pos.	
Sub. Request Fuel Delivery	
Message: Date 2016-09-20	
Message 1.1 Request diesel fuel at the Comm Trailer	0
App'd Larry Eker Pos. Ops Officer	
Comp MT63-2KL * 382 bytes / 30 secs	

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.

Save data file			<u> </u>
↓ Larry → NBEMS.files	s 🕨 ICS 🕨 messages	✓ 4y Search messages	م
Organize 🔻 New folder			· · · · · · · · · · · · · · · · · · ·
Favorites	A Name	^	Date modified
Desktop	E	No items match your search.	
Documents			
File name: Message 1-1 Save as type (1CS-213		m	•
Hid Folders		Save	Cancel
7			
inter File Name		Then pres	s 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 AutoSent.

FLMSG: 3.00.02		□ x
<u>File Form Template</u>	Config AutoSend ARQ	Help
ICS-213 report	file: Message_1-1.213	
Originator Responder		
Reply	Date 2016-09-20	
Fuel will arrive at	1800Hrs	<b>^</b>
		2
		Ţ
Name	Pos. Fleet Manager	]
Comp MT63-2KL	▲ 488 bytes / 35 secs	

10. The response will be sent.

#### 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.

Rcvd Msgs			23
002.213			
W0KCK-201	70919-000	053L-2-	001.213
W0KCK-201	70919-000	053L-2-(	002.213
<u> </u>			
			<u> </u>
	Clear All		VION4

- 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.

GEN	ERAL MESSAGE	(ICS-213)	
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 :			
8. Approved by: Name : John Smith	gnature :	Position/Title : Logistics	
8. Approved by: Name : John Smith 5: 9. Reply :	gnature :	Position/Title : Logistics	
<ul> <li>8. Approved by: Name : John Smith</li></ul>	gnature :	Position/Title : Logistics	
8. Approved by: Name : John Smith 9. Reply : Can send 1 showle and 60 rakes	gnature :	Position/Title : Logistics	
8. Approved by: Name : John Smith — 9. Reply : Can send 1 showle and 60 rakes	gnature :	Position/Title : Logistics	