FLDIGI Configuration 101

=== Operator configuration parameters ===

Callsign: Your callsign
Name: Your first name
QTH: City, state (2 character abbreviation)
Locator: Your 6 character Grid Square

=== UI configuration parameters ===

Not important. No changes necessary.

=== Waterfall configuration parameters ===

 *** Display TAB ***

Bandwidth cursor – checked
Cursor center line – checked
Bandwidth tracks – checked

Always show audio frequencies – checked
Monitor transmitted signal – checked

FFT Processing Tab – defaults are okay
Mouse Tab – defaults are okay

=== MODEMS configuration parameters ===

 *** MT63 Tab ***

64 bit (long) interleave – checked
8-bit extended characters – checked
Transmit lower start tone – checked
Transmit upper start tone – checked
Tone Duration: default to 4 seconds

Allow manual tuning – <u>NOT</u> checked
(This will keep you from accidently clicking on the waterfall
and messing things up)

=== RIG Control configuration parameters ===

This will primarily control your PTT function.
It can vary but should be easy to set up.
Most problems relate to incorrect COM Port selection
or malfunction of USB to RS232 converter if one is used.

*** Hardware PTT Tab ***

PTT tone on right audio channel – NOT Checked ==
Used if you want a VOX circuit to key your transmitter.
Probably N/A to our applications.

Use separate serial port – checked
If you are using USB to RS232 converter and are having problems
try unchecking this

Device dropdown menu - will only display valid Com ports
Select computer Com port used for radio interface.

Use RTS (Request to send) pin - checked if true
RTS= +V - not checked in most cases (ground will key)

Use DTR (Data Terminal Ready) - checked if true
DTR= +V - not checked in most cases (ground will key)

Initialize button - Will set parameters after you are finished

** RigCAT Tab **

This is where you set up complete control of the radio from FLDIGI.
Beyond the scope of this tutorial.
If you are having problems keying your rig via the RS232 port,
issuing a CAT command may work.

*** Hamlib *** *** MemMap *** *** XML-RPC ***
Advanced CAT functions ... beyond scope of this tutorial.

=== **Audio configuration parameters** ===

*** Devices Tab ***

Port Audio - checked

Capture - Dropdown menu that will display recognized audio devices.
Choose device that will be used to receive audio from receiver.

Playback - Dropdown menu that will display recognized audio devices.
Choose device that will be used to send audio from computer to transmitter.

File I/O only - Not checked

=== **ID configuration parameters** ===
 *** Do not use any video preamble ***
It adds considerable time to transmit data.

*** Do not enable CW Postamble ID ***
This also adds time to send data and a CW ID is not required.
I didn't know that "Postamble" was a word.

*** Under Reed-Solomon ID (RX) ***
Detector checks entire passband - checked
Mark previous frequency and mode - checked
Reception disables detector - Not checked (IMPORTANT!)

=== **MISC configuration parameters** ===
 *** NBEMS Tab ***

Under NBEMS data file Interface

Enable - Checked
Open message folder - checked

Under Reception of FLMSG File
Open with Flmsg - checked
Open in browser - Normally Not checked
  Note: If you want the msg opened in HTML view, check this box

flmsg locate box - point to the <u>current</u> version of flmsg.exe
Located under c:\Program files\FLMSG-x.x.x (use the most current version) - XP
For Win 7 64 bit it's under Program Files(x86)

*** Sweet Spot tab ***
CW – 1000
RTTY – 1000
PSK et al – 1000
Always start new modems at these frequencies - checked (<u>IMPORTANT</u>)

CW is LSB - unchecked but it doesn't make any difference.

=== FLMSG … Where are my files located? ===

A question that often comes up when using FLMSG is where the files are located.

FLMSG stores files in slightly different locations depending upon what operating system you are using.

For the Good Guys who are using Windows XP (Greatest OS ever written):

Received files are located:
C:\documents & settings*main user folder*\NBEMS.files\WRAP\recv

Files queued/saved for transmission:
C:\documents & settings*main user folder*\NBEMS.files\ICS\messages

---

For the other Guys who are using Windows 7 (Not really your fault):
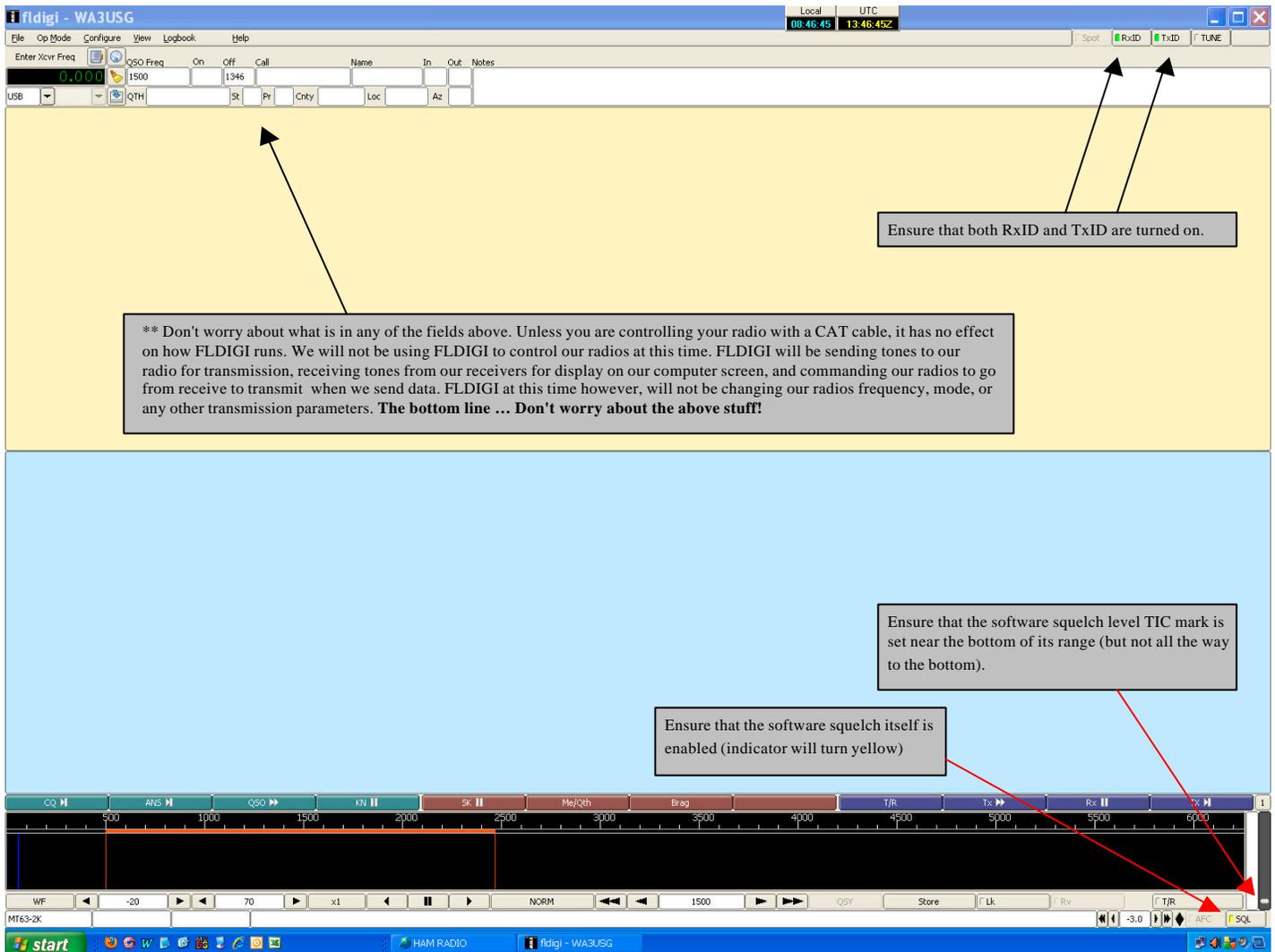
Received files are located:
main user folder\NBEMS.files\WRAP\recv

Files queued/saved for transmission:
main user folder\NBEMS.files\ICS\messages

FLDIGI Main Screen Parameters are on next page !

Ensure that both RxID and TxID are turned on.

** Don't worry about what is in any of the fields above. Unless you are controlling your radio with a CAT cable, it has no effect on how FLDIGI runs. We will not be using FLDIGI to control our radios at this time. FLDIGI will be sending tones to our radio for transmission, receiving tones from our receivers for display on our computer screen, and commanding our radios to go from receive to transmit when we send data. FLDIGI at this time however, will not be changing our radios frequency, mode, or any other transmission parameters. **The bottom line … Don't worry about the above stuff!**

Ensure that the software squelch level TIC mark is set near the bottom of its range (but not all the way to the bottom).

Ensure that the software squelch itself is enabled (indicator will turn yellow)

** The T/R tab at the bottom of your screen **toggles** your radio from receive to transmit. It turns red during transmit and goes back to gray during receive. If you accidentally click on it and you go to transmit, it won't necessarily go back to receive immediately after another click. Don't panic … it will go back to receive in a few seconds.

** Don't be afraid to play with the software squelch sensitivity level. If you find that you are missing some of the first characters when you go to receive, drag the sensitivity level a little lower. If you want, you can even turn the squelch off by clicking on the **"SQL"** tab. Without the Squelch turned on, you may receive some garbage characters when nothing is being received but that really doesn't cause any serious problems.

** Watch your transmit audio level. You should really have a receiver set to the frequency that you're transmitting on so you can monitor your tones. An HT works fine. If you are communicating through a repeater, set the receiver to the repeater input frequency. If your tones are too hot, you will deviate out of the passband of the repeater and no one will receive you, or you will be garbled (I'm not sure about the spelling of garbled).

** All of the above suggestions are for FM only, transmitting on HF using SSB is an entirely new animal and requires different operating techniques … but it is not difficult!

** If you're using an external soundcard (eg: Signalink), ensure that you have "USB Audio CODEC" selected in both the capture & Playback areas under the Soundcard configuration. If you accidentally have "Microphone" selected under capture. You may decode some of the data because it is being picked up by your computers microphone from the radio speaker… but it will not be reliable. This will cause great gnashing of the teeth and wondering what the hell is going on.

** Finally, if FLDIGI is just acting weird & you can't get anything to work, exit out of it and restart FLDIGI. Remember … we are running under Windoze! … and don't give me any of this Lenix crap, It'll probably crash sometimes under that too.

** That's my story and I'm sticking to it! …. 73, Dick, WA3USG