Fast Simple QSO's (FSQ)

By
Al Sheppard, W4ZSC
alw4zsc@gmail.com

- FSQ is a ham radio text communication digital mode. Can xmit files/pictures.
- FSQ is intended for 80-20 Meter short distance, single hop (NVIS near vertical incidence skywave)
- Unlike many other digital modes, it does not require synchronization.
- Operate in a "chat" mode. Type what you want to say, hit ENTER, and it is sent between 2 to 6 baud depending on your conditions (20-60 wpm) in a BW of 290 HZ.
- Uses MFSK (multi frequency shift keying) with 33 tones. Communicate fastest using lower case which only uses single tone

Preferred FSQ Frequencies ITU Region 2 (N & S America)

- 3594 KHz
- 7104 KHz
- 10144 KHz
- 14104 KHz
- 18114, 21124, 24924, 28124, 28144, & 50644 are not officially accepted because these are not NVIS (near vert. incidence skywave) frequencies but some experiment with them

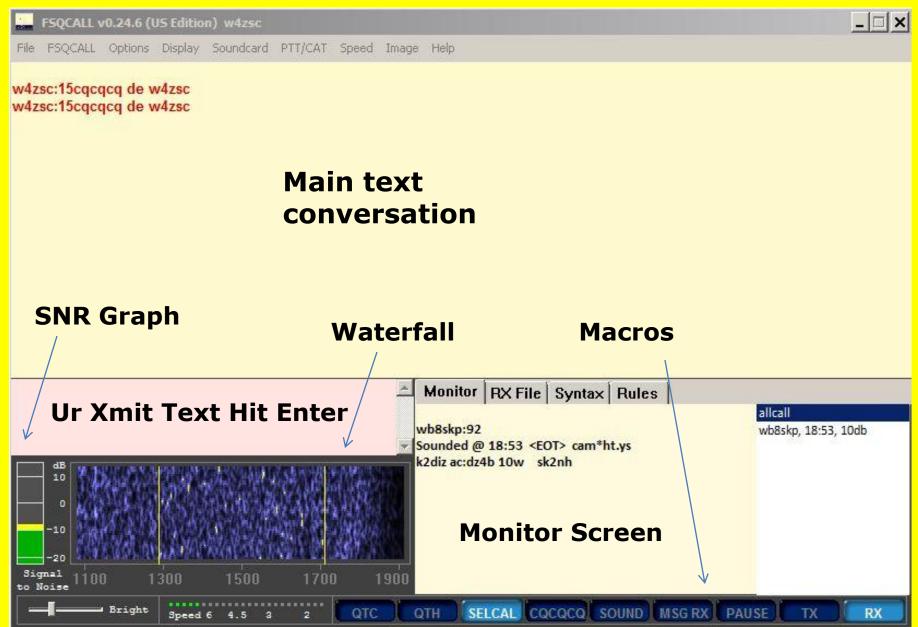
Setting up the FSQ Software

- Download and Open Software. Under Menu Bar, set up Sound Card, with e.g., SignaLink USB Codec
- Menu Bar, Options, put in your call and QTH
- Accept Defaults on other choices until you get familiar and think you want to change them. If you have a really strong or really weak signal you may wish to speed up to 6 or down to 2 baud—3 is default
- Calls must always be lower case

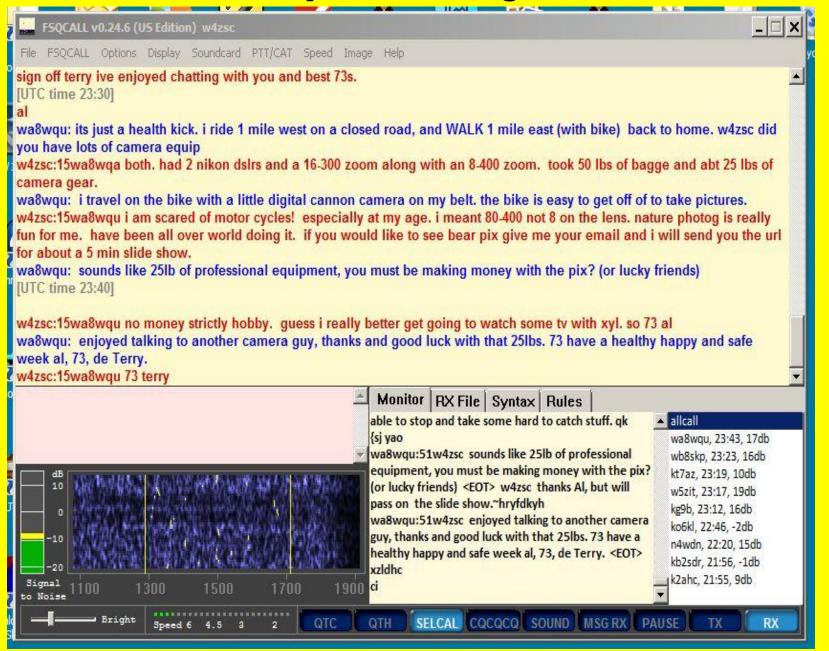
Software Short Commands

- Never need to type your call only station you are chatting with. Software makes your call show.
- ? What is my SNR—read from lower left bar graph
- @ What is your QTH
- < or > slow down or speed up baud rate 2, 3, 4.5, 6. 3 default
- A number of others—see biblio

FSQ Software Screen



Example of FSQ Chat



FSQ Image Transmission from 7 dB SNR



160x120 LoRes Col 320x240 HiRes Col 640x480 B&W

Xmit Times
48 sec
192 sec
256 sec

Internet and Bibliography

- Developer Description and Software Download <u>http://www.qsl.net/zl1bpu/MFSK/FSQweb.htm</u>
- eHam Forum
 http://www.hamradioforum.net/threads/5798

 -FSQ-a-new-mode-!
- QST, September 2015, pp 34-39, FSQ
- FSQdigital Yahoo Group
- Fldigi digital software includes FSQ and most other digital modes http://www.w1hkj.com/
- CQ Magazine, November 2015, pp 58-61, FLDIGI and FSQ