How to Setup Your Transceiver and get on the air for Most Digital Modes, and Specifically on the

ICOM 7300 for FT-8

These notes are not meant to provide the answers on how to get you up and running on FT-8, but rather it is a presentation of how I have been able to set up my IC-7300 for best performance in this mode. All settings referenced are the ones I currently use on my 7300 and I have to this date made about 10,000 confirmed contacts, so at least I can say they work for me. They are not meant to give you a comprehensive understanding nor a foolproof setup but should be a good starting point.   Good luck..... Mert Kenniston KC1KVA

- Download and Install Driver from your IC-7300 CD or the ICOM website on your computer (or from your transceiver manufacturer's website)

- Install required cable – Standard USB with the Type B Square End to your transceiver and a standard USB Type A end on the computer side.

    Note: If you are not using the IC-7300 check you transceiver manual to determine if your transceiver has a built in sound card. If it does not, you will need an outboard unit to act as your sound card, connected between your computer and the transceiver. Popular models of this interface are Signalink Tigertronic unit, MFJ's Digi Link, West Mountain's Rig Expert or Rig Blaster or Yaesu's digital interface box. You will probably need a special cable from the interface manufacturer to connect. Make sure you have the right pin wiring set up on the unit.

1. Setup IC-7300 Switches

     a. <u>Switches:</u>   <u>Selection:</u>

2. **Preamp (Front panel button)**   *Off (except for very weak stations)*

3. **Function, AGC:**   *Off*

4. **Menu, Set, Connectors:**

    a. **Data Mode:**   **USB**

    b. **ACC/USB Output Select**   **AF**

    c. **ACC/AF Output Level**   **50%**

    d. **ACC/USB AF SQL**   **Off (Open)**

    e. **ACC/USB Beep/Speech**   **Off**

    f. **ACC/USB IF Output Level**   **50%**

    g. **ACC MOD Level**   **50%**

    h. **USB MOD Level**   **40 to 50%**

    i. **DATA OFF MOD**   **MIC,ACC**

    j. **DATA MOD**   **USB**

    k. **USB Serial Function**   **CI-V**

    l. **USB SEND**   **RTS or DTR**

    m. **USB Keying (CW)**   **DTR**

    n. **USB Keying (RTTY)**   **DTR**

5. **Menu, Set, Connectors, CI-V:**

      i. **CI-V Baud Rate**   **Auto**

     ii. **CI-V Address**   **94h**

    iii. **CI-V Transceive**   **Off**

    iv. **CI-V USB Remote Transceive** **00h**

     v. **CI-V Output (for ANT)**   **Off**

    vi. **CI-V USB Port**   **Unlink Remote**

   vii. **CI-V USB Baud Rate**   **Auto**

  viii. **CI-V USB Echo Back**   **On**

2. **Download WSJT-X Users Guide**   Check *out the FT-8 Portion of the guide*

3. *Download* **WSJT-X Software**   *Do Search for WSJT-X PrincetonPhysics*

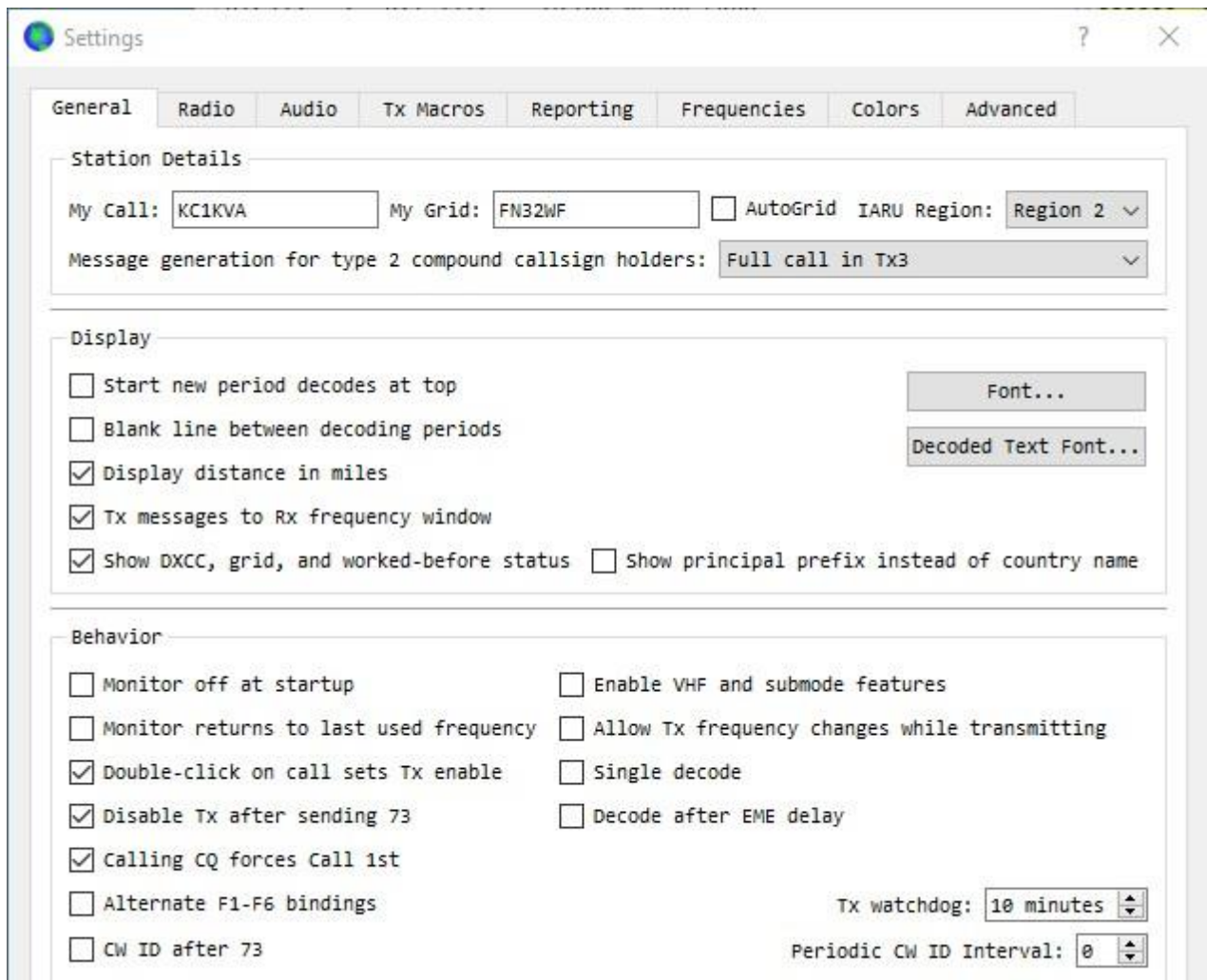4. **Setup WSJT-X**   *Review On-Line Users Guide for WSJT-X 2.5*

Start WSJT-X – Then at top of screen select:
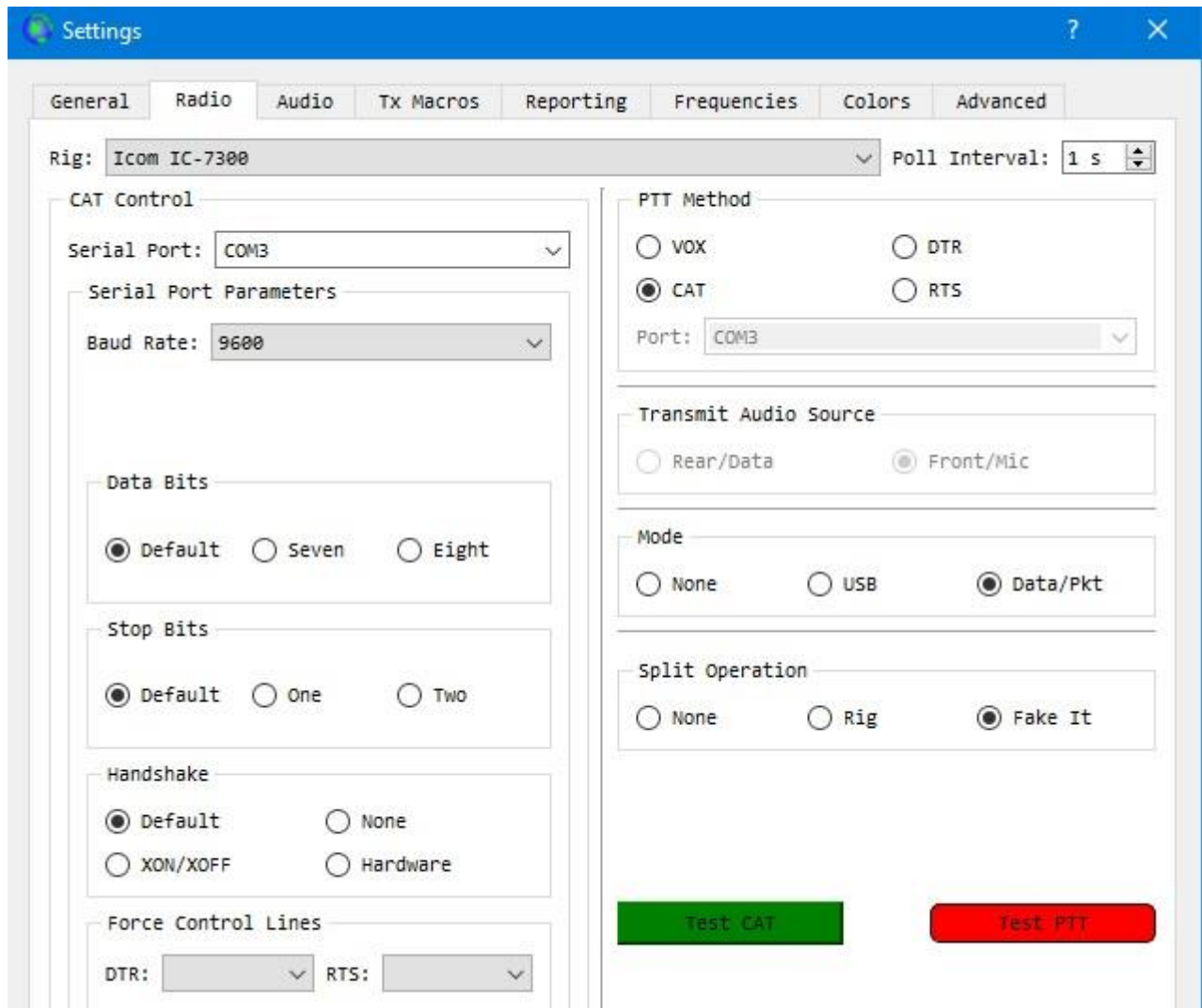
View – Click on **waterfall**

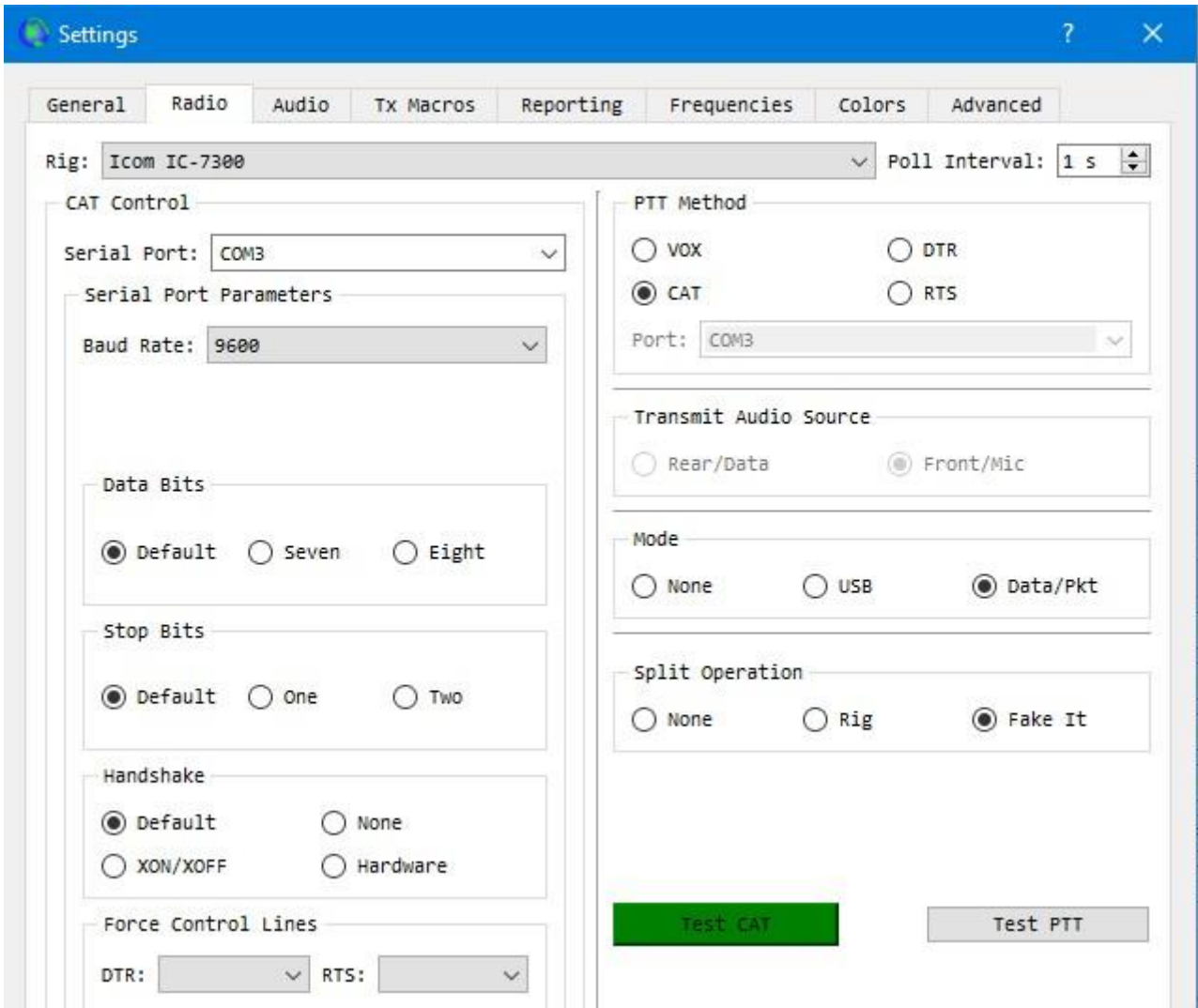*Mode – Click on* **FT-8**

Decode – Click on **Normal**

At top of WSJT screen Click on **FILE**, *then on* ***Settings*** *then on* ***General***

Then click on RADIO

*Then click on **Audio***

Settings ? ✕

General | **Radio** | Audio | Tx Macros | Reporting | Frequencies | Colors | Advanced

Rig: | Icom IC-7300 | ⌄ | Poll Interval: | 1 s ⬍

CAT Control

Serial Port: | COM3 | ⌄

Serial Port Parameters

Baud Rate: | 9600 | ⌄

Data Bits

◉ Default   ○ Seven   ○ Eight

Stop Bits

◉ Default   ○ One   ○ Two

Handshake

◉ Default   ○ None
○ XON/XOFF   ○ Hardware

Force Control Lines

DTR: | ⌄ | RTS: | ⌄

PTT Method

○ VOX   ○ DTR
◉ CAT   ○ RTS

Port: | COM3 | ⌄

Transmit Audio Source

○ Rear/Data   ◉ Front/Mic

Mode

○ None   ○ USB   ◉ Data/Pkt

Split Operation

○ None   ○ Rig   ◉ Fake It

Test CAT   **Test PTT**

5. WSJT-X Screens   Main Screen

Click on a CQ entry to initiate a response

Color codes (file, settings, colors)
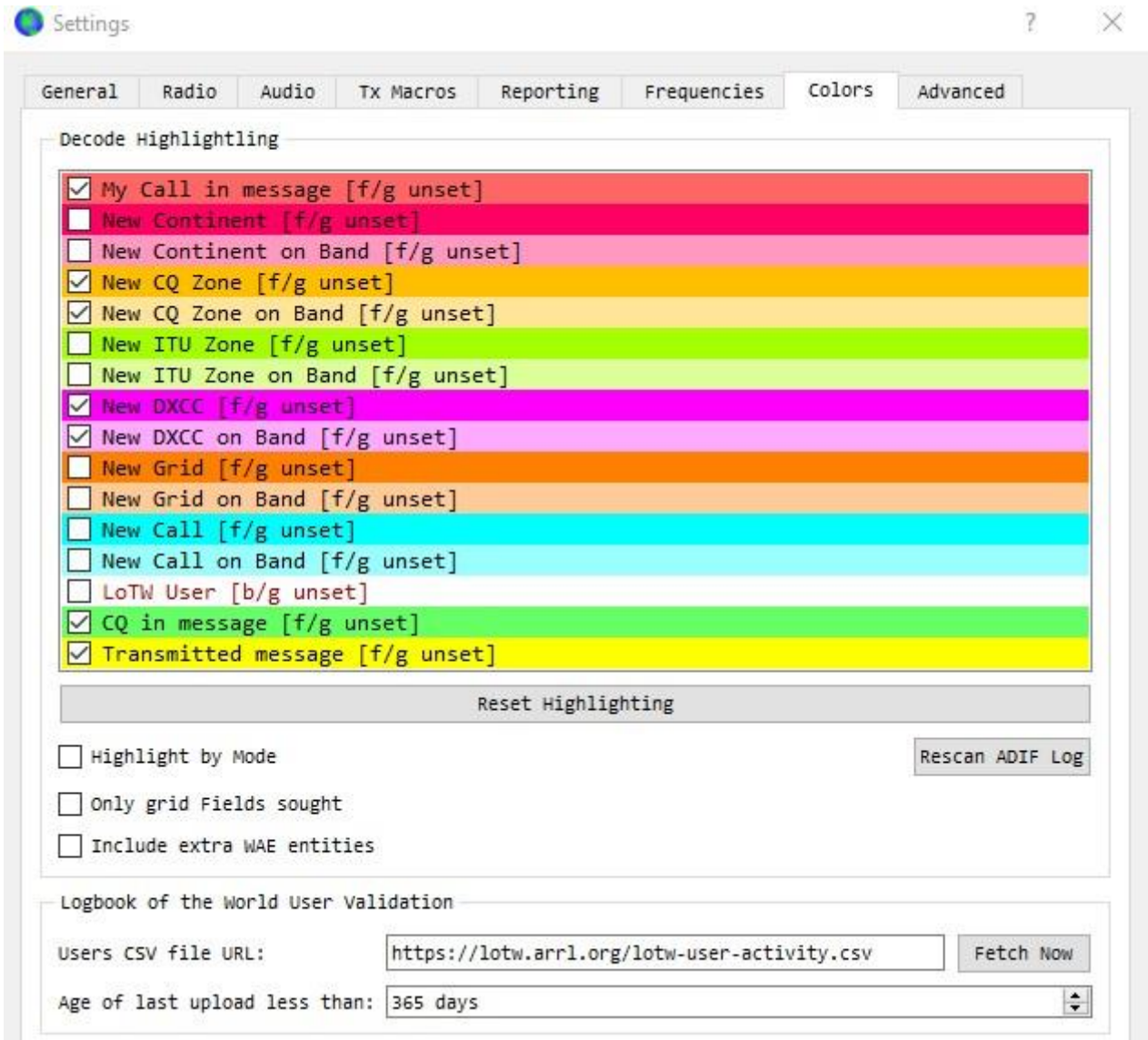
Waterfall enable with "View" (top menu)

6. Time.is   *Check your time sync delta. >1.5 seconds is problem*
Which will be red flagged on mail WSJT screen.

7. **Sync your clock**   *Net Time, Dimension 4, or Meinberg NTP*

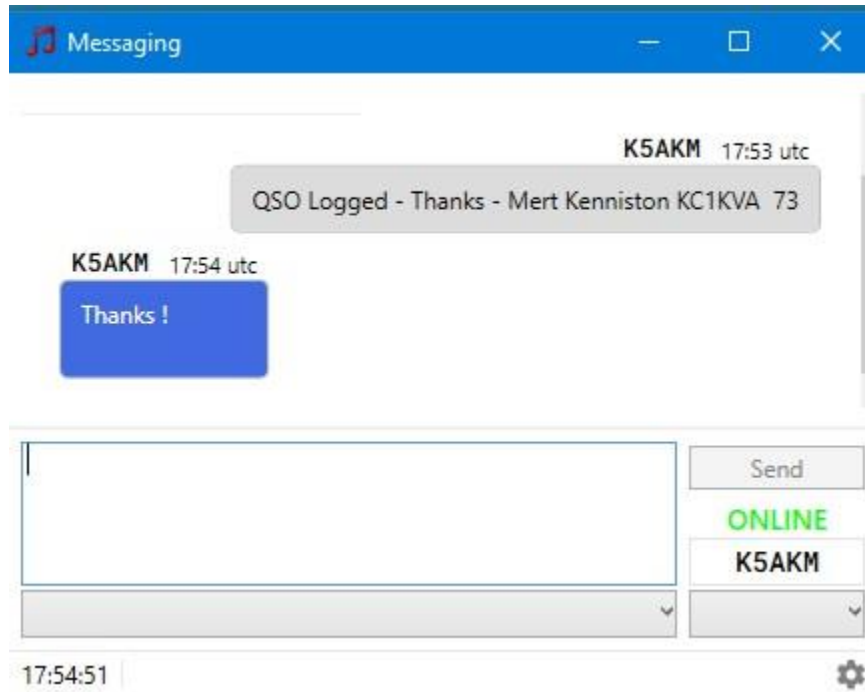*8.* ***Time to Test Your Setup***   *WSJT-X and transceiver now have preliminary setup*
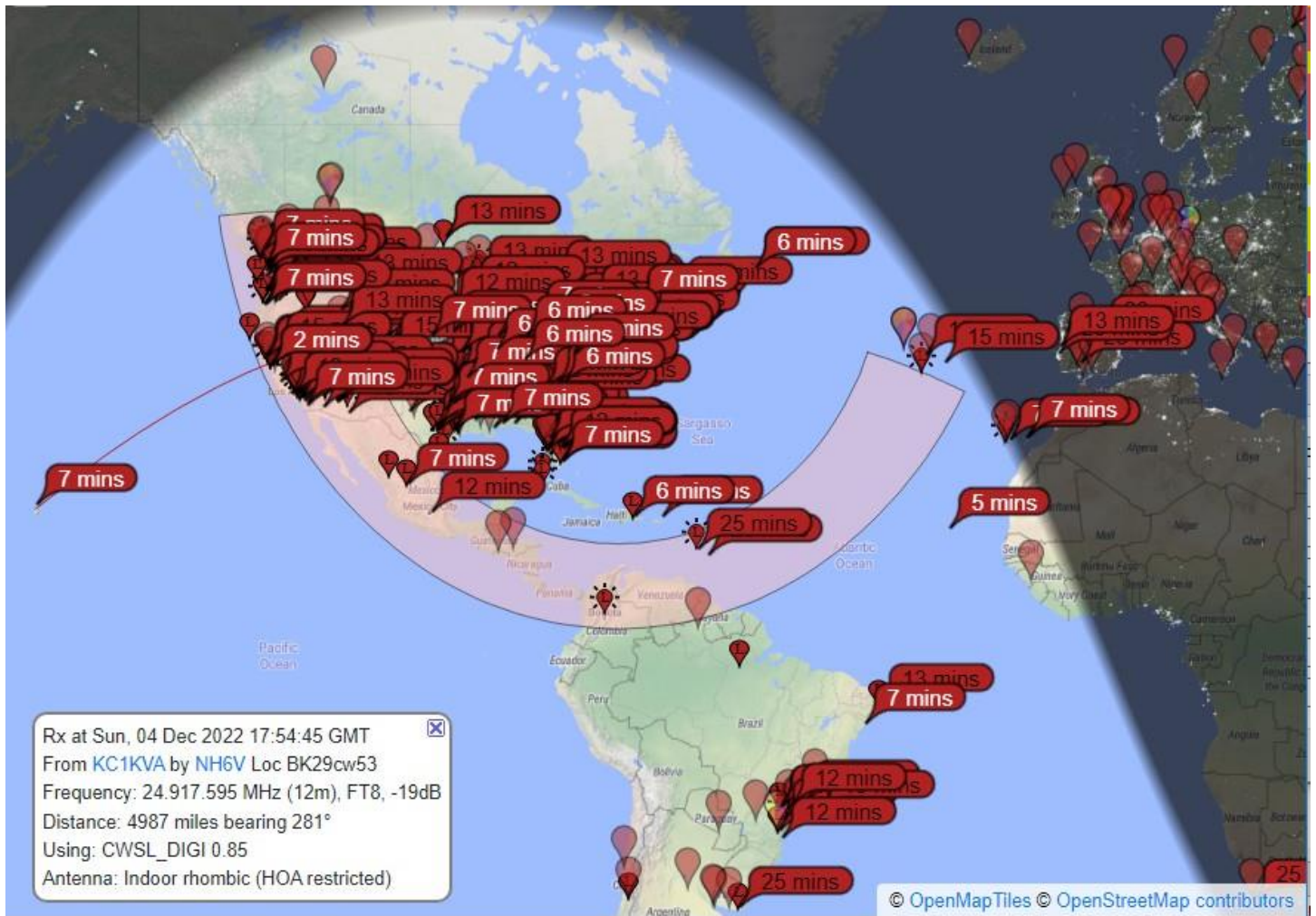*Solve any configuration and test problems before*
continuing

CAT and PTT Test buttons on WSJT should work.
Test Cat should turn Green, PTT Should turn Red

9. **Load & setup JT Alert if Wanted** *Online: HamApps.com*

10. **Auto ACLog Interface** *Allows automatic logging to ACLog*

11. **JT Alert Messaging** Message *your FT- Contacts*

Rx at Sun, 04 Dec 2022 17:54:45 GMT
From KC1KVA by NH6V Loc BK29cw53
Frequency: 24.917.595 MHz (12m), FT8, -19dB
Distance: 4987 miles bearing 281°
Using: CWSL_DIGI 0.85
Antenna: Indoor rhombic (HOA restricted)

12.   **PSK Reporter**   *See who received your signals*

13.   **QRZ**   *For more detail on your contacts*

14.   **Upload to QRZ & LOTW**   *Save from wsjt log.adi to LOTW and/or QRZ*