YARA Appendix – Radios, Laptops and Software

Note: This checklist is for operators who have had familiarization training with the radio/software or who have read or watched the reference materials.

Checklist

1. Using a transceiver without digital programs or panadapter
   - ☐ The antenna outside is connected to outside coax port
   - ☐ Coax jumper cable is connected between the inside coax port and the radio
   - ☐ On TS-590S, jumper cable is connected to antenna 1
   - ☐ Radio power cable is connected to Anderson power distribution box
   - ☐ The radio is turned on and appropriate settings are selected: Mode (CW, SSB, et)
   - ☐ The appropriate power setting for mode is selected
   - ☐ Other settings are made as required (filters, noise blanker, AGC, etc.) – see the manuals in the references on the website

2. Using a digital program (Winlink or WSJT-X.)
   - ☐ The CAT/USB cable is connected between the transceiver and the laptop.
   - ☐ For the ft-890, the audio cable is connected between the transceiver and the laptop. The ts-590S does not require an audio cable.
   - ☐ The laptop and radio power are turned on.
   - ☐ The device manager on the laptop is selected to determine which com port the laptop is using with the radio.
   - ☐ Only one digital program is booted up (only one digital program can be used at a time).
   - ☐ The program settings dialog box is opened, and the correct settings are made for the radio (com port, speed, etc.) – see sample screenshots
   - ☐ The TS-590S menu #63 (audio input line) is set to "USB", not "ACC2"
   - ☐ The audio settings dialog box is opened (Winlink, WSJTX), and the correct audio source is selected e.g. CODEC # - see sample screen shots
   - ☐ The frequency on the radio and program will be the same and move in unison when changed by the radio or software.
   - ☐ The correct power setting is selected (digital modes generally use a lower setting than CW and SSB – check the references and manuals)

3. Using the fldigi program (with CW, RTTY, PSK, on of many other modes)
   - ☐ The CAT/USB cable is connected between the transceiver and the laptop
   - ☐ For the ft-890, the audio cable is connected between the transceiver and the laptop. The ts-590S does not require an audio cable.
   - ☐ The laptop and radio power are turned on.
   - ☐ The TS-590S menu #63 (audio input line) is set to "USB", not "ACC2"
   - ☐ The device manager on the laptop is selected to determine which com port and the correct audio source (CODEC #) the laptop is using with the radio.
   - ☐ Flrig is booted up (interface between the transceiver and Fldigi)
   - ☐ The radio configuration window is opened and correct settings for the radio and the audio source are selected
   - ☐ Flrig is initialized
   - ☐ The frequency and controls on the radio and software will work in unison when changed by the radio or flrig

- ☐ Fldigi is booted up and one of the modes is selected (CW, RTTY, PSK, etc.)
- ☐ Other settings in fldigi are selected as required (macros, levels, and other features) – study the help manual for familiarization
- ☐ The correct power setting is selected (digital modes generally use a lower setting than CW and SSB – checked the references and manuals)

4. SDR Console (padapater/waterfall) – A RTL-SDR dongle is provided, but other SDR receivers can be used
   - ☐ The SDR Console with work with CW, SSB, AM, and FM broadcast modes, but not with other digital programs. However, the other programs don't require a panadapter because they each have their own visual interface for the transceiver.
   - ☐ If the operator has not set up the SDR panadapter before, it is recommended that they watch the video showing how to set one up.
   - ☐ The CAT/USB cable is connected between the transceiver and the laptop, using a USB hub (if the laptop does not have enough spare USB ports)
   - ☐ For the ft-890, the audio cable is connected between the transceiver and the laptop. The ts-590S does not require an audio cable.
   - ☐ The antenna jumper coax is connected to the MFJ 1708 SDR switch
   - ☐ One short coax jumper cable is connected between the transceiver and the MFJ 1708 SDR switch.
   - ☐ The other short coax jumper cable is connected SDR receiver and the MFJ 1708 SDR switch. The coax cable is connected to the SDR receiver through SMA adapter or SMA cable.
   - ☐ SDR switch control cable is connected between the SDR switch and appropriate port on the radio – check the radio operating manual.
   - ☐ The accessory power cable is connected between the SDR switch and power distribution box. A red light should go on.
   - ☐ The SDR receiver (dongle) is connected to the to the laptop USB port or through the USB hub.
   - ☐ The device manager on the laptop is selected to determine which com port and the correct audio source (CODEC #) the laptop is using with the radio.
   - ☐ OmniRig is booted up and the correct settings made. See screen shot example. The frequency displayed in OmniRig will be the same as shown on the transceiver.
   - ☐ SDR Console is booted up and the correct SDR receiver selected on start-up (RTL-SDR)
   - ☐ The various settings on SDR Console are available in the menu bar at the top of the program viewing area. The operator should become familiar with these options and select the correct ones to make the SDR Console work optimally with the transceiver. – see resources and videos
   - ☐ The SDR Console program and transceiver will be synchronized and work in unison when the controls on the radio or the program are used.
   - ☐ When adjusted properly, the waterfall will display all the RF activity and other information on the screen.

5. N1MM Logging Program
   - ☐ The N1MM Logging Program can be used standalone or interfaced with digital programs like WSJT-X and needs to be set up for this
   - ☐ The operator can customize the program for Field Day, contests, and just logging contacts.
   - ☐ If the operator is not familiar with M1MM they can read the reference materials or watch the videos