

Radio Room Instructions for WX3OES Station

Radio Room at the Office of Emergency Management

When broadcasting from radio room, use call sign WX3OES on any ARES/RACES business or emergency use. Use of your own call sign is only permissible when the radio room is being used for demonstration on non-MCARES operation.

VHF/UHF via Repeater with Yeasu FT-2900 1 FT-8100

Using The FT-2900 for Repeater Operation

- FT-2900 is VHF only, and has 20 memory settings (numbered 0-19) on the 2m band; programmed for the 20 closest repeaters. o See the list on the wall by map.
- Go to OONO power pole distribution switch mounted on forward edge of wooden shelf; On the OONO...
 1. See switch on left labeled "Astron 50" and verify green light next to "normal." If not, then look at the Astron 50 on the floor under the table, and put its (red) power switch to "on" (lit up)
 2. Lift up on the switch labeled FT-2900

If FT-2900 does not power up, press orange power button on the FT-2900 radio.

3. Lift up on the switch labeled Speakers (this powers up speakers for both radios)
 - On the Radio: Tune to desired repeater o It will likely already be tuned to the WX3 OES repeater 146.865 MHz = memory register (MR) #0
 - If it is not, turn the big tuner knob on the front right of the radio to move through memory settings.
 - To tune through frequencies instead of memory channels, press the "Set MHz" button; the display will show frequencies, and the tuner knob will move in frequency increments (VFO). (In VFO mode the memory channel # will display if tune into a frequency that is also a programmed memory setting) o To display call signs of repeaters press 'MW' button to move through memory channels again.

You are now ready to transmit on the FT-2900

TO SHUT DOWN:

Please tune the FT-2900 back to WX3OES memory setting.

On the OONO, press down on the switches for "speakers" and "FT-2900", (Astron 50 remains on constantly)

The FT-8100 for repeater operation • FT-8100 is both VHF and UHF capable.

- it has dual tuners so 2 frequencies appear on the display.
 - The left side is set with VHF memory channels on the 2m band; approx. memory channels 1-21, with closest VHF repeaters.
 - The right side is set with UHF memory channels on the 70 cm band: approx. memory channels 1-44, with closest UHF repeaters.
 - (This means memory channels 1-21 on left will NOT be the same as 1-21 on the right)
 - Go to OONO power pole distribution switch mounted on forward edge of wooden shelf; On the OONO...
1. See switch on left labeled "Astron 50" and verify green light next to "normal." If not, then look at the Astron 50 on the floor under the table, and put its (red) power switch to "on" (lit up)
 2. Lift up on the switch labeled FT-8100
If FT-8100 does not power up, press "PWR" button on the FT-8100 radio.
 - a. Behind the old speakers on shelf, bright blue rotating switch - move it to 8100 (not 9700)
 3. Lift up on the switch labeled Speakers (this powers up speakers for both radios)
 - On the Radio: Tune to desired repeater
FT-8100 will likely already be tuned to WXOES 146.865 on the left side (VHF 2m) and KG3I/R 447.275 on right side (UHF 70 cm) The bottom left (larger) tuner dial will change the channel for the side of the display which has the mountain/shark fin icons near it.
 - Push INWARD on the upper smaller knob (same knob rotates for volume, but for this push in) on the side of the display that you want to change; this causes the mountain/shark fin icon to appear on that side, and to give tuner knob control to change that side.
See list on wall (pinned up near map) with list of which repeaters are in programmed in which memory channel.
 - The display will show the memory channel number just above and left of the frequency (this display does not show letters for call signs, only numbers for frequencies) so cross reference to the list on the wall for call signs.
 - (WA3 MDP has been damaged by lightning with no known repair date so is no longer a programmed channel. For reference, in case of return to function, that frequency is 147.045 to toggle the function of the tuner knob between scrolling through memory channels and scrolling VFO by frequency, press the button marked "VFO/MR" which is the 2nd bottom down from top, on right hand side of radio.
- VOLUME is the front outer rotating little knob and SQUELCH is the back liner rotating little knob right behind it — so be careful not to accidentally move SQUELCH when you only want to change VOLUME.

TO SHUT DOWN:

Please tune the FT-8100 back to the WX3OES 146.865 on the left and KG31441.575 on right on the OONO, press down on the switches for "speakers" and "FT-8100" (Astron 50 remains on constantly)

VHF/UHF Simplex with Yeasu FT-2900 / FT-8100

- Go to OONO power pole distribution switch mounted on forward edge of wooden shelf; On the DONO...
 1. See switch on left labeled "Astron 50" and verify green light next to "normal." If not, then look at the Astron 50 on the floor under the table, and put its (red) power switch to "on" (lit up)
 2. Lift up on the switch labeled FT-2900
If FT-2900 does not power up, press orange power button on the FT-2900 radio.
 3. Lift up on the switch labeled FT-8100
If FT-8100 does not power up, press "PWR" button on the FT-8100 radio.
a Behind the old speakers on shelf, bright blue rotating switch — move it to 8100 (not 9700)
 4. Lift up on the switch labeled Speakers (this powers up speakers for both radios)
 5. On FT-2900, turn big VFO tuner knob on right to one of the designated ARES/RACES frequencies:
memory register (MR) 2 for SPLEX 1 = 147.420 MHz or
MR 3 for SPLEX 2 = 147.435 MHz o If you want to use a different frequency, press the "Set MHz" button to cause tuner to scroll through frequencies (VFO) rather memory settings.
O Press the "MW" button to have tuner scroll through memory settings.
 6. On FT-8100:
O Left side memory is programmed for VHF I Right side is set for UHF.
o Push the top smaller knob inward to bring mountain/shark fin icon to side you want to tune.
Use tuner knob (lower left) to one of the designated ARES/RACES frequencies.
 - **Left side.**
 - SPLEX 1 = 147.420 MHz on memory setting#2
 - SPLEX 2 = 147.435 MHz on memory setting #3

 - **Right side**
 - SPLEX 3 = 446.050 on memory setting #2???
 - SPLEX 4 = 446.075 on memory setting #3???
 - To toggle between tuner knob controlling scroll through memory and scroll through frequency (VFO), on the right side of front of radio, press the 2 ad button from the top labeled "VFO/MR."
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- TO SHUT DOWN:
Please tune the FT-2900 back to WX3OES repeater 146.865 MHz, and the FT-8100 back to WX3 OES on left and KG31, 441.575 MHz on right
On the OONO, press down on the switches for "speakers", "FT-2900", "FT-8100".

VHF/UHF with the Icom| 9700

1. Turn ON power via OONO Power Distribution Switch:
 - confirm Astron 50 light is green (if not, switch on Astron 50 power supply under desk)
 - turn on Icom 9700
2. Behind the old speakers on shelf, bright blue rotating switch — move it to 9700 (not 8100)

On the Icom 9700 for VHF • push in upper MAIN button – to make top display active.

- Push VIM button until MEMO shows on screen to indicate memory mode.
- Top Right MULTI button will now scroll through memory channels.
- Rotate to memory channel 19 for VHF 147.420 MHz (in FM mode) o Rotate to memory channel 13 for WX3OES repeater.

On the screen underneath "FM" there is a small font display that should say S&SWR - touch to scroll through its various functions until S&SWR appears. o S for incoming signal strength o Key mic to see SWR for outgoing — will only show when mic is keyed but you don't need to talk b/c on FM the carrier signal is pushing through. (On SSB would need to talk)

Push inward on the upper right MULTI button to see the Power screen. it's a 100-watt radio, so % will = watts (Push MULTI again to make it go back to regular display?)

- No need to tune this antenna (vertical dipole)
- You can push the VIM button to come out of memory mode.
- Beware this hand mic has buttons on top for channel UP and channel DN (down) so be careful to only push the push-to-talk on the SIDE of the mic if you want to hold frequency. Use the buttons on the top of the mic if you want to pop through memory channels without touching the radio box to do it.

TO TURN EQUIPMENT OFF

- Turn OFF power via OONO Power Distribution Switch:
- turn off the 9700 (indicator light will go out)
- leave Astron 50 power supply on (light is green)

HF SSB with the Yaesu| FTDXIO

Note: equipment manuals are located in horizontal file in black file cabinet on left as you walk in the door

1. Turn ON power via OONO Power Distribution Switch:

- confirm Astron 50 light is green (if not, switch on Astron 50 power supply located under desk)

- turn on (push up) FT-DXIO power switch (indicator light will turn green)
- optional: turn on SWR meter power switch (indicator light will turn green)

2. Set antenna switch to radio position (not to dummy load position).

3. To select desired band: press BAND button, then tap desired band on screen.

4. To select desired frequency: turn VFO knob.

5. To set power: press FUNC knob, tap RF POWER on screen, turn FUNC knob to desired power level (up to 100 watts). Press FUNC knob again to return to normal display.

6. To tune antenna: once desired frequency is dialed in, press, and hold TUNE button for one or two seconds, release and wait until tuning is complete. Radio is now ready for transmitting. NOTE: In the unlikely event the tuner fails to bring SWR to an acceptable level, the radio will not transmit. You must select another frequency and/or band. Also, notify ARES/RACES leadership to troubleshoot the problem.

7. To access commonly used functions (e.g., monitor level, mic gain): press FUNC knob and tap appropriate display function.

8. To widen or narrow display range: tap SPAN at bottom of display and select desired range from pop-up.

9. To quickly access ARES/RACES frequencies on 20, 40 and 75 meters: press M button, rotate FUNC knob to desired band/frequency and press FUNC knob. Press the VIM button to return to normal display.

TO TURN EQUIPMENT OFF

1. Turn OFF power via OONO Power Distribution Switch:

- turn off FT-DXIO power switch (indicator light will go out)
- if on, turn off SWR meter power switch (green indicator light will go out)
- leave Astron 50 power supply on (light is green)

2. Set antenna switch to dummy load position.