An overview of how I put together my POTA and Contest go boxes



POTA/Contest Rigs

Contest Setup

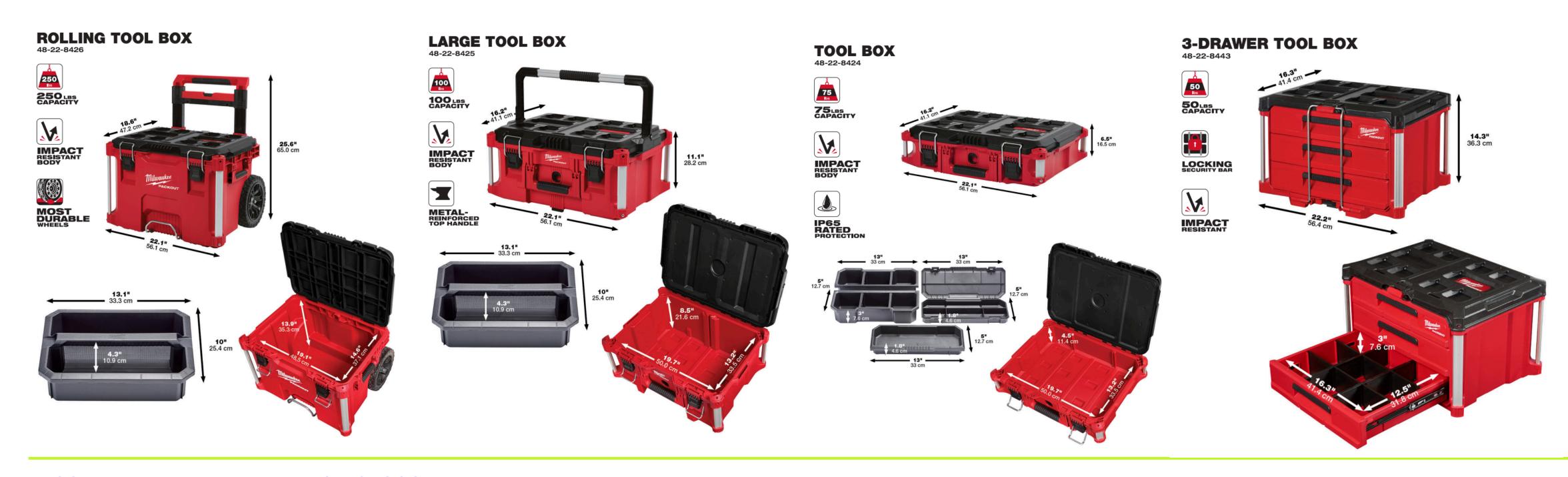
- 26' Enclosed trailer complete setup for boondocking
- Multiple antenna setups
- Multiple operators





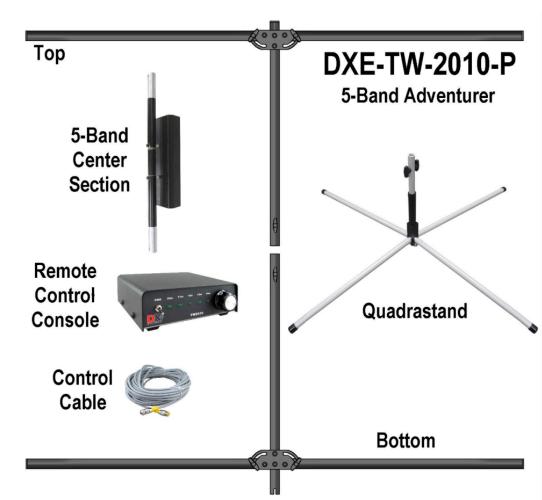
Rotomold Boxes

- Chose Milwaukee Packout due to the larger selection of box types
- Other brands include Ryobi, Dewalt, Craftsman, Husky, Makita, etc.



Radios & Antennas

- HF Yaesu FT-891
 - DigiRig 891
 - MyAntennas EFHW-1K 40-10
 - Trans World 5 Band Explorer + 40m
 - Operate at 50w
- VHF Yaesu FT-310DRASP
 - Diamond X-300









Batteries Included - Contest

- Contest Rig 2 x 100ah 12v LiPO4 batteries
 - Powers computer/monitors/radios operating constant FT8 for ~16 hours for each battery
 - One can be charging while the other is being used





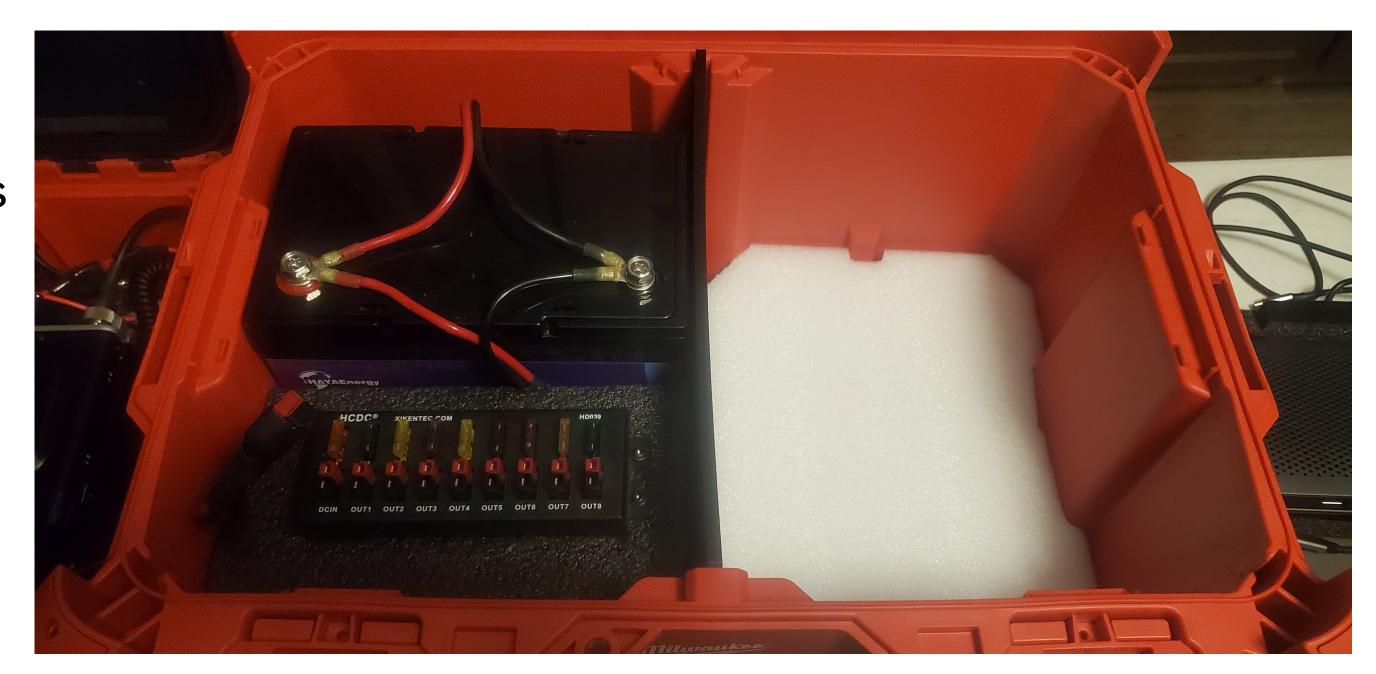






Batteries Included - POTA / EMCOMM

- 1 x 50ah 12v LiPO4 battery
 - Estimated EMCOMM runtime is 24 hours
 - Box has room to store antenna controller, 12v computer, coax, etc.



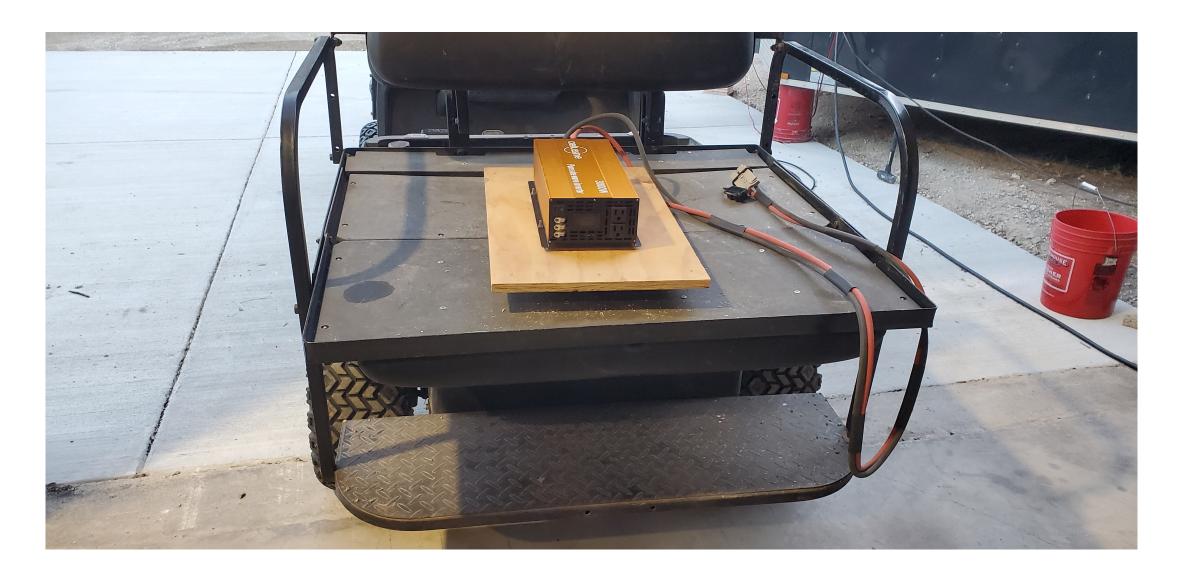
Batteries Included - Extended Stay

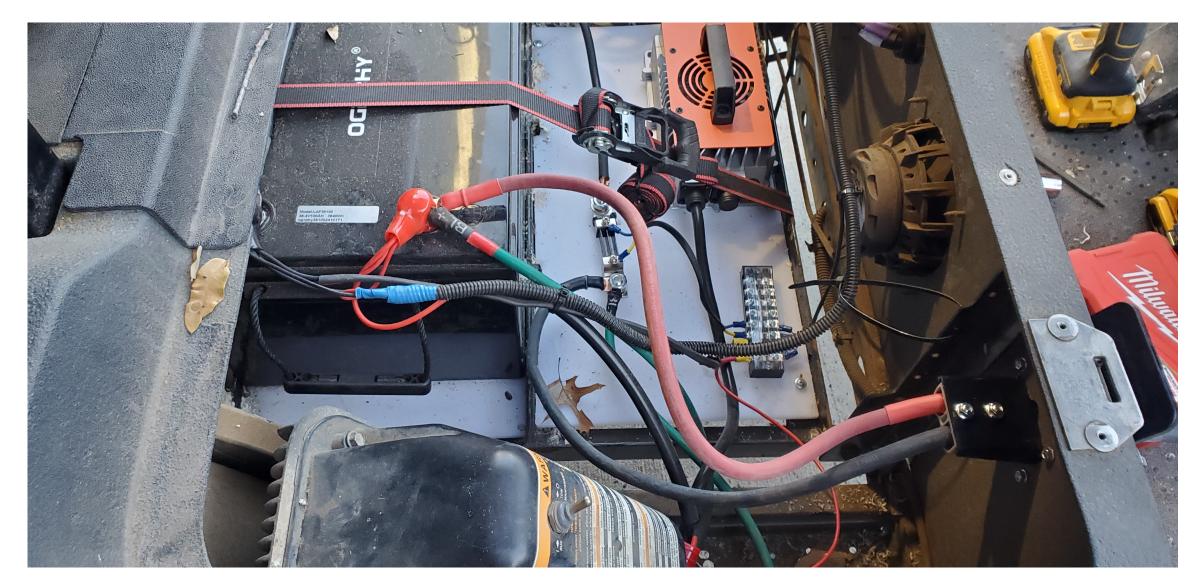
- Anker Solix F2000
 - Can be used as a UPS
 - Can be attached to solar panels
 - RV Plug for powering enclosed trailer



Batteries Included

- 36v Golf Cart 100ah battery
 - 36v 3000w inverter
 - Ran the enclosed trailer over the entire Winter Field Day event and still had 50% battery left





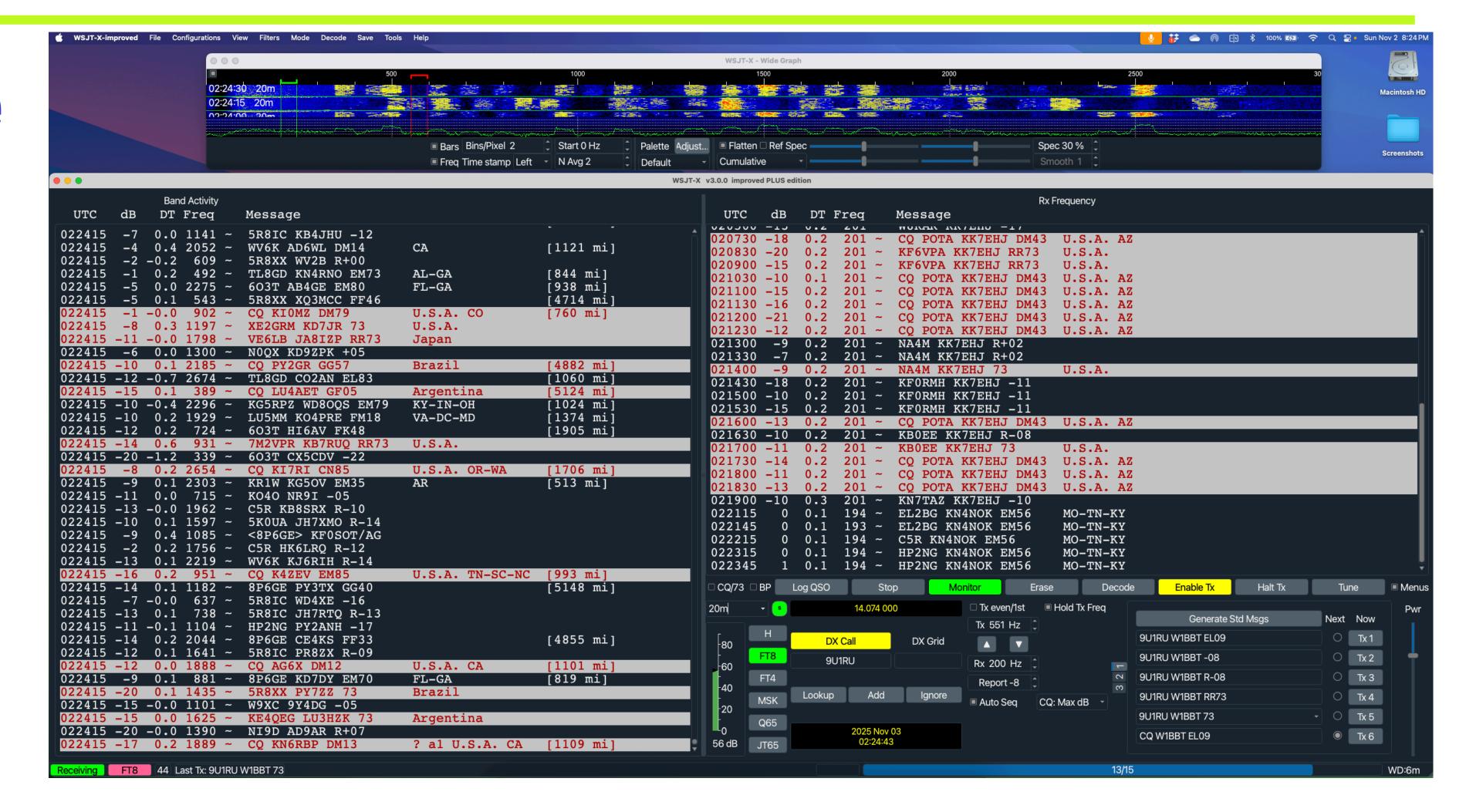


Go Box Build Cost (Shipped)

- Radios \$1300 (DX \$700 FT-891, Gigaparts \$600 FTM-310DRASP)
- 50' of 8X coax (DX \$80 orange, \$55 black)
- Packout Boxes \$400 (Home Depot Online during a MAJOR sale)
- Batteries \$370 (Facebook Marketplace \$140 x 2, Amazon \$90 x 1)
- 12v Computer \$190 (Amazon)
- 15" Screens \$140 (Amazon \$70 x 2)
- Misc connectors and wire \$100 (Amazon)

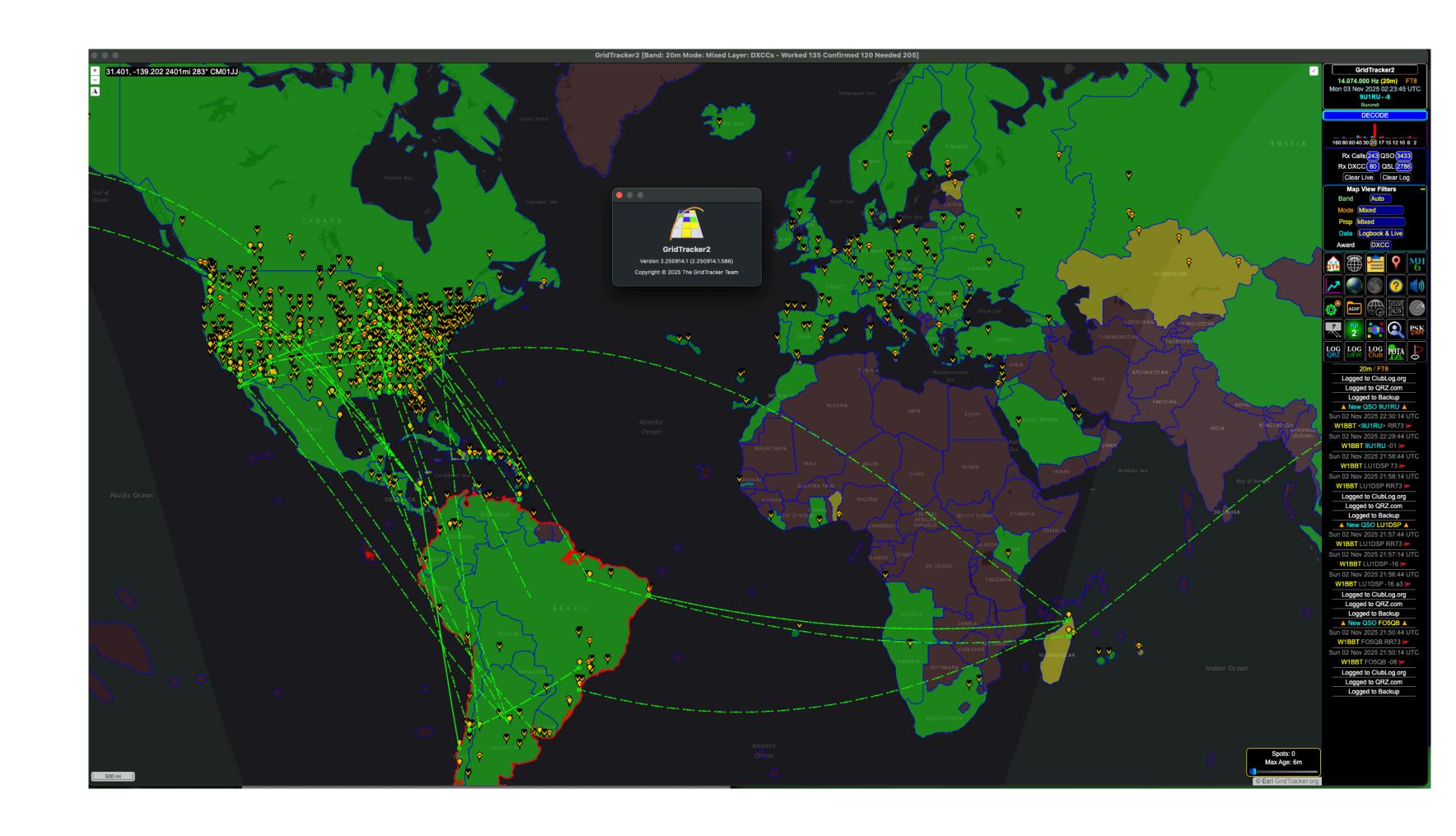
Software

- WSTJ-X Improved 3.0
 - Dark mode
 - Pounce mode
 - Call Lookup



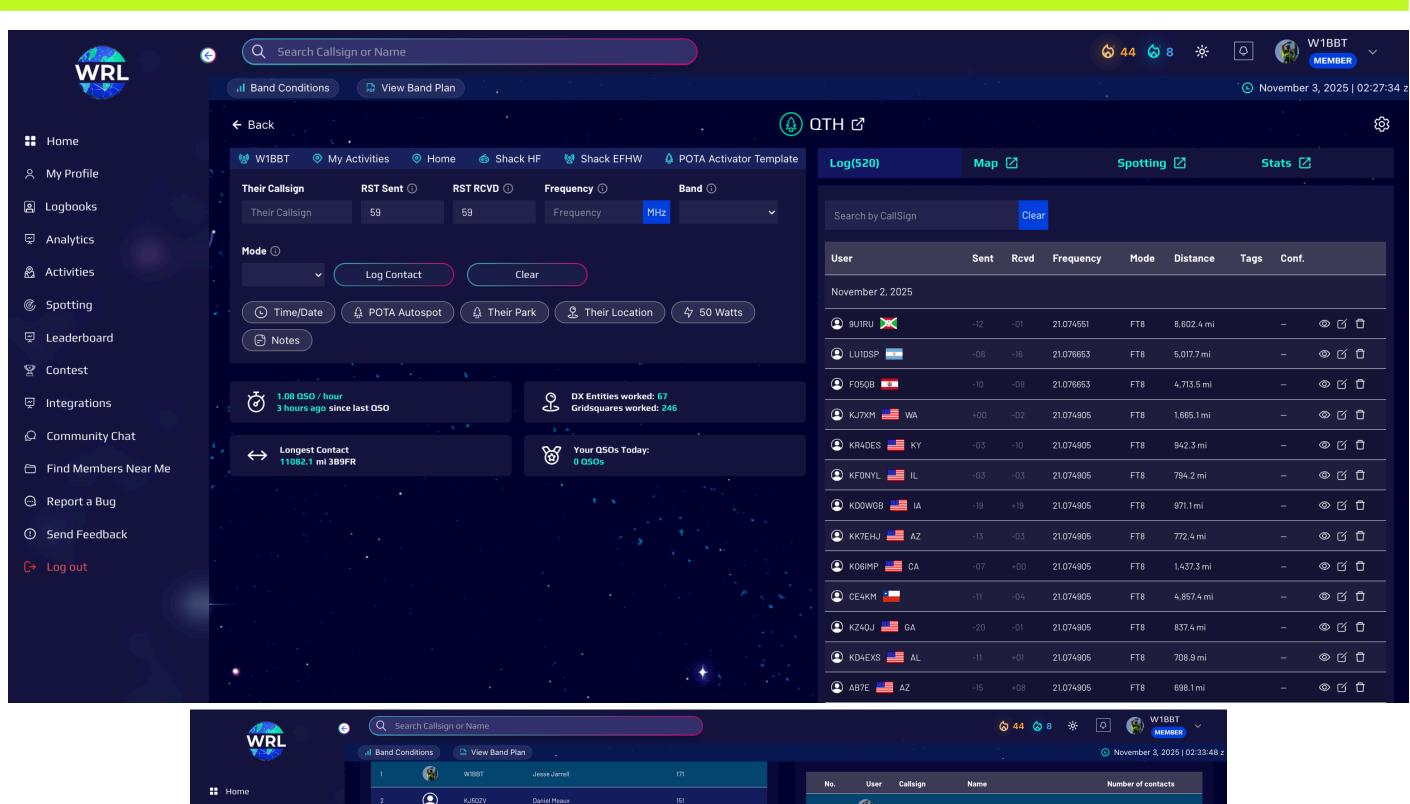
Software

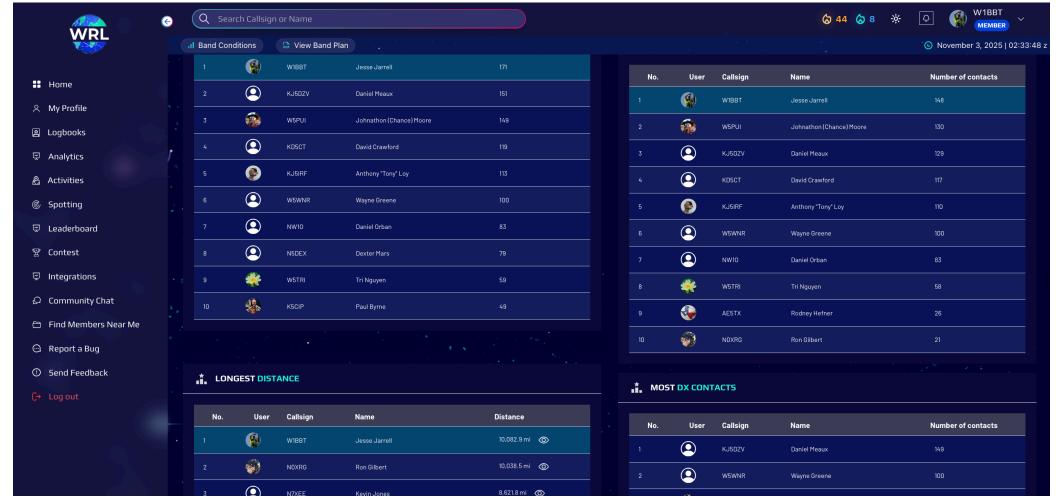
- Gridtracker 2.25
 - Forwards logs to QRZ,
 Clublog and a backup file
 - Forwards QSO to World Radio League's CAT Control



Software

- World Radio League
 - Excellent offline system on iPad
 - Auto uploads once re-connected to internet
 - Been working with them over the past month with bug fixes and suggestions. VERY responsive and have implemented several of my suggestions.
 - Currently browser based, but desktop version coming soon
 - Leaderboard competition is addictive





How to Save Money

- Do you need both HF and VHF?
- Buy used radios. Lots of deals at the hamfests.
- Milwaukee is the most expensive box. If expansion is not a priority, go with a cheaper brand
- You don't need to do both POTA and Contest builds

Future Work

- Switch from using 12v Windows computer to MacBook Pro/IPad so that my shack and POTA experience is the same.
- Add more permanent lighting for working at night
- Adding whiteboard to enclosed trailer