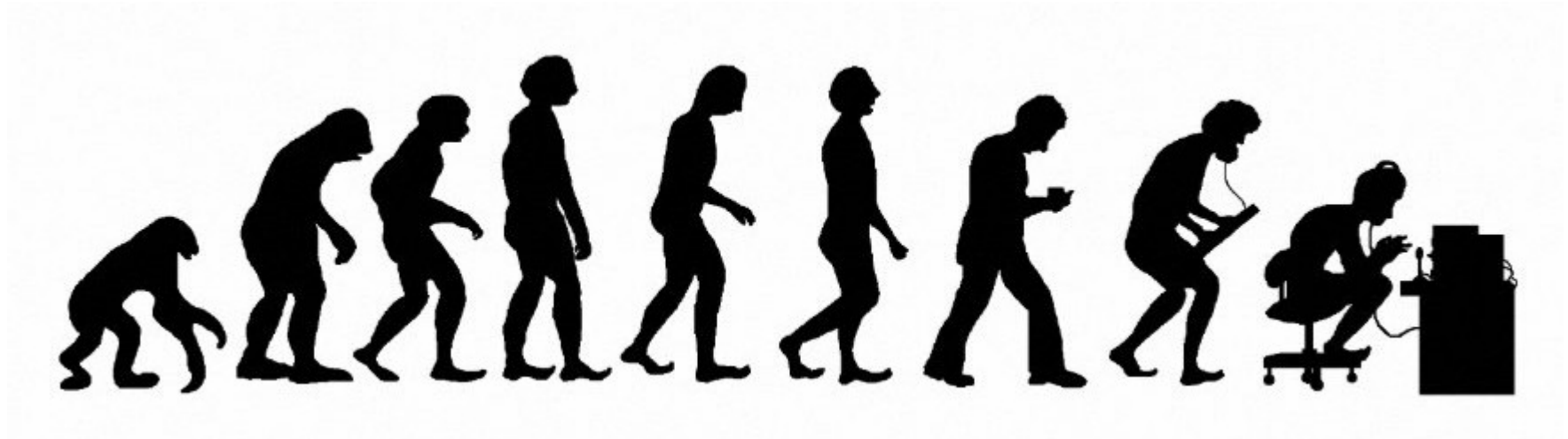


The Evolution of a Ham and his Radio's



What I wish I knew before buying a Radio?

- Wikipedia Defines Amateur Radio as follows:

Amateur Radio, also known as ham radio, is the use of the radio frequency spectrum for purposes of non-commercial exchange of messages, wireless experimentation, self-training, private recreation, radio-sport, contesting, and emergency communications.



Let's Break it Down

- Messages – Send email over RF via WinLink Software, APRS - Auto Pkt Reporting System: Tracking & Text Messaging
- Wireless experimentation – Moon Bounce, Satellite, Digital Hotspots, FT4/8
- Self-training – Build antennas, build radios, learn Morse Code
- Private Recreation – FRS & GMRS, used in hunting, 4x4, camping, boating
- Radio-sport – SOTA, POTA, 13 Colonies, Rt 66, Fox Hunt...
- Contesting – Point values assigned to types of contacts and modes of operation. Compete with other radio operators, locally, nationally and globally
 - Eg: State QSO Parties, Field Day, CQ WW WPX ...
- Emergency Communications – K3SMT Net, disaster communications, search and rescue, weather nets, etc.

How do you want to use your Radio?

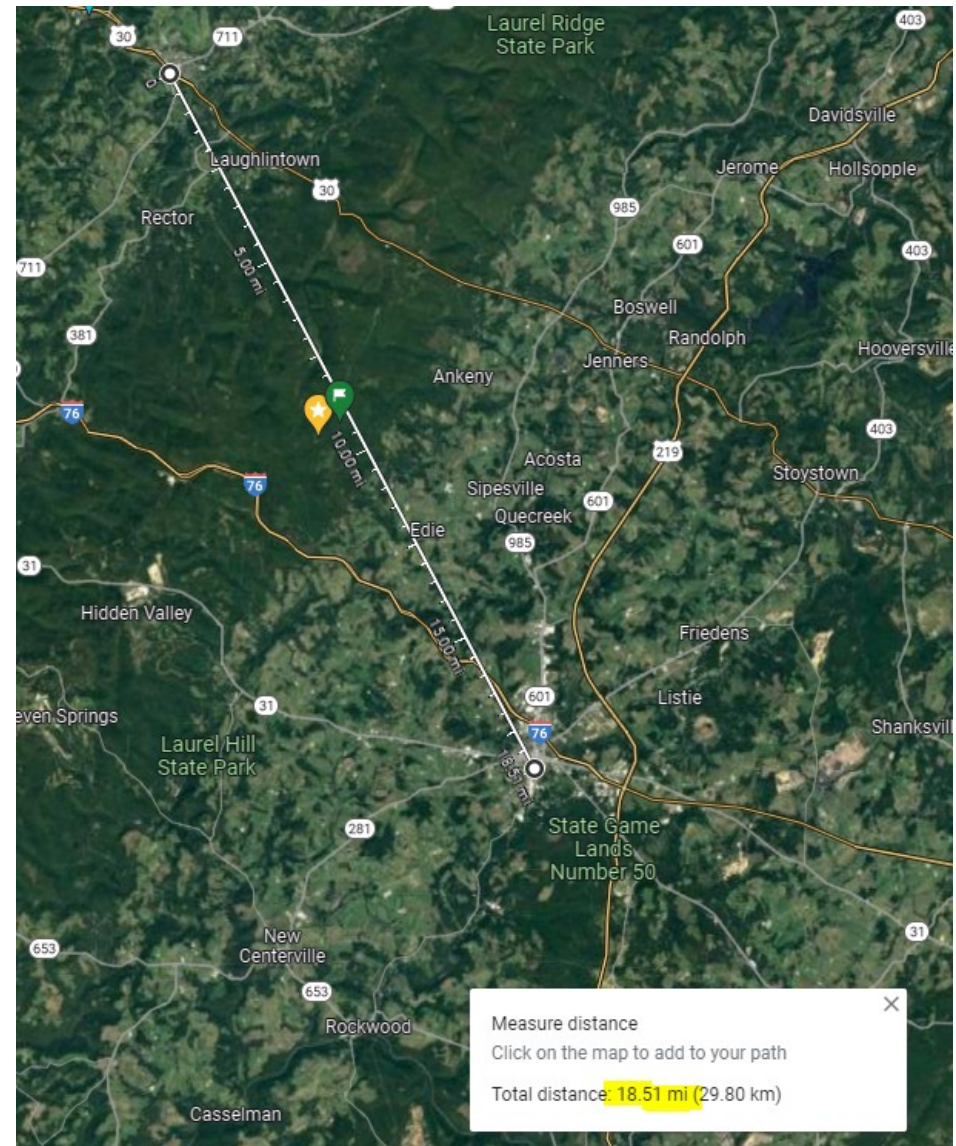
- Camping, Cycling, Contests, Radio-Sports, Satellite Comms, 4x4, Nets, Digital Chat Rooms ...
- Hand held, mobile, desktop?
- Analog, Digital, SDR?
- What about Antenna's?
- How about your Coax and connectors (BNC or SO-239)?
- Do you want APRS?
- What about Digital Modes?
 - Who's brand of Digital: DMR, D-STAR, YSF
 - Or a HotSpot that can cover all digital modes.
- How are you going to power your new radio?



The Radios I Chose and Why I Chose Them

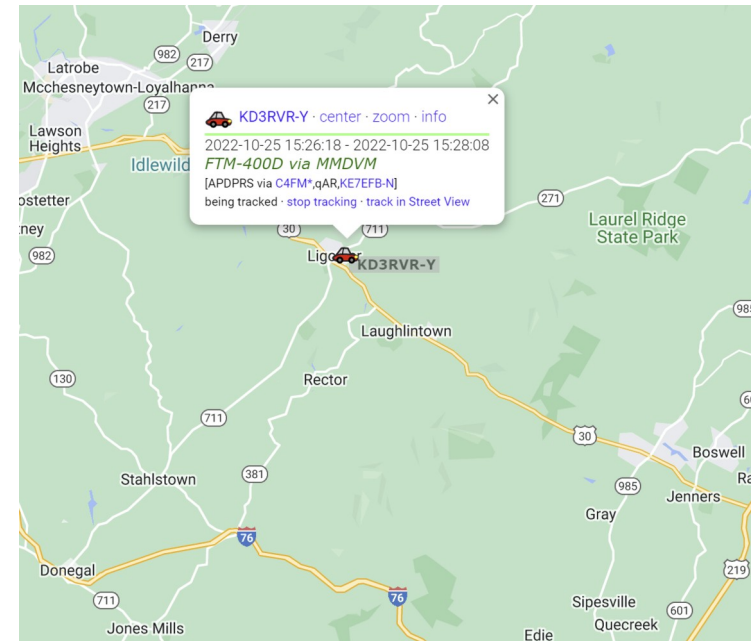
- Handhelds – Baofeng UV-5R and Yaesu FT3DR
- UHF/VHF in Shack – Yaesu FTM-400XDR
 - ZumSpot (Pi-Star)
- Mobile – TYT TH-9800 Quad Band Radio for my Tacoma
- RV – FTM-300DR
 - OpenSpot (SharkRF)
- HF – Icom IC-7300 with 8010 EFHW Antenna
- Power Supply: Pyramid PSV-300 – Powers UHF/VHF & HF Radios
- Field Radio – Xiegu G90

My Very First Station



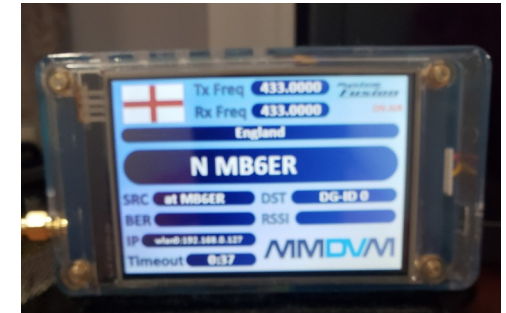
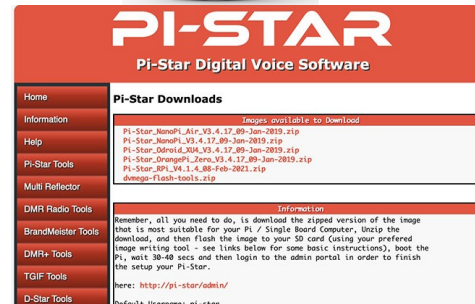
Handheld Radios

- Baofeng: UV-5R
 - Inexpensive, easy to program via CHIRP software, compact format, can TX/RX on 440, 2M, GMRS & FRS frequencies. Receives WX Band.
(Hunting, recreation)
- Yaesu: FT-3D (Digital)
 - APRS – Automatic Packet Reporting System.
 - Track your travels
 - Send Text msgs to other radios
 - There is also an APRS phone app
 - Can connect to repeaters that support digital modes or get a HotSpot.
 - Digital Mode
 - WiresX, Yaseu System Fusion (YSF)
(Events, Digital Comms, APRS Tracks)



UHF/VHF (Shack)

- Yaesu FTM-400XDR with Quad Band mobile antenna on roof peak.
 - 50w Dual Band, Digital Radio
 - Large touch screen, easy to use with HotSpots.
- Open Spot 4 Pro
 - SharkRF app on Smartphone
 - Covers all modes including D-STAR
- ZumSpot = Pi-Star
 - Personal Digital Hotspot
 - Digital Modes: YSF, DMR, etc.
 - Digital DX via the Web

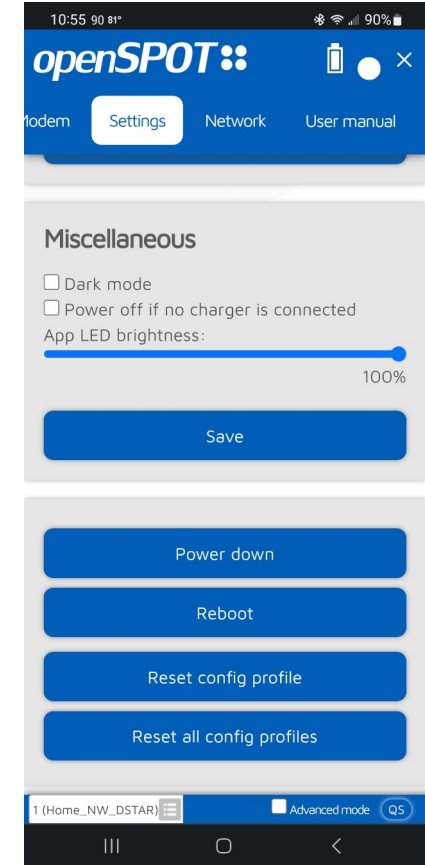
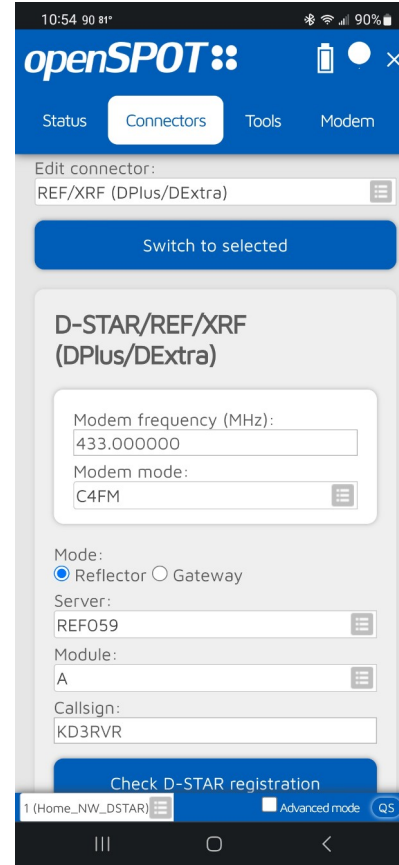
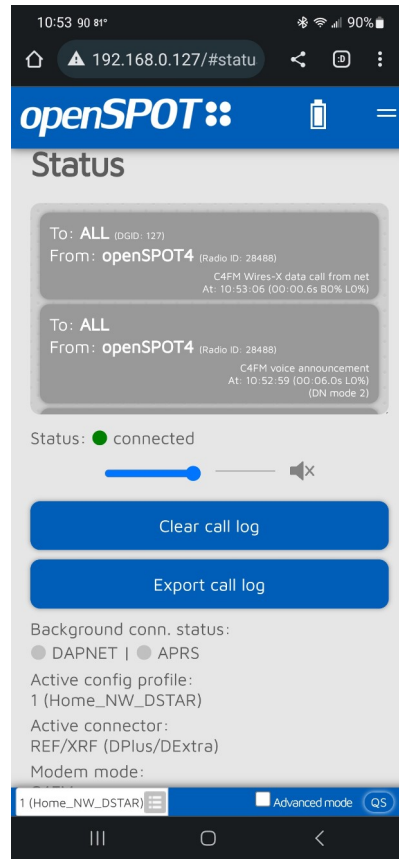
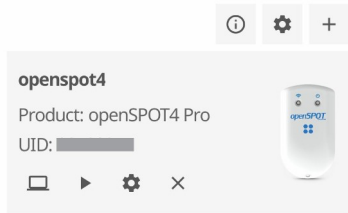


Yaesu FTM-400XDR with ZumSpot (Pi-Star)



OpenSpot 4Pro

- Easy to setup via Smartphone or Windows, Linux, or MacOS (Beta) App
- Handles all Digital Modes including D-STAR



Mobile – TYT TH-9800 Quad Band FM Radio

- Chinese clone of Yaesu FT-8900R, which Yaesu no longer sells.
- 440, 2 Meter, 6 Meter, 10 Meter... FM only.
- It also receives 11 meter CB stations for real-time traffic reports from truck drivers.
- Antenna is a Diamond quad band, 440 thru 10 Meter
- 10 Meter is 28 – 29.700 MHz and CB is 11 Meter or 26.965-27.405 MHz so the quadband antenna is not optimal for CB reception. However, you can tune the antenna into the 11M band for better CB reception for those real-time traffic reports. (mobile radio in Tacoma)



Field Radio – Xiegu G90

- Xiegu G90 is a portable 20W HF amateur radio transceiver with an SDR architecture and built-in automatic antenna tuner. 160-10 Meters
- Chameleon EMCOMM-II 160-6 Meters Antenna
- MS Surface Pro for Logging
- All fits into small backpack for SOTA, POTA, or field operations.



HF – Icom IC-7300 with 8010 EFHW Antenna

- Built in Tuner
- Waterfall
- Easy to use and navigate
- Full feature HF radio at entry level pricing.





<https://www.gigaparts.com/qrzjumpstart>

QRZ, RT Systems and GigaParts are teaming up to offer a more sustainable program that will run at least through the end of this year and will be expanded to include hams who have been licensed for 6 months or less. The new program offers a coupon code to the new ham that gives them a QRZ-1 radio, programming cable, RT Systems programming software, New Ham Welcome Kit, and a QRZ membership for only \$21.99.

This program is available to amateur radio operators licensed in the USA and expires December 31, 2022, or while supplies last. To signup, new hams should complete the application process at www.qrz.com/jumpstart



Questions?