

OVPA Communications

Simplified Recommendations

Every CPT member should own,

- **Baofeng BF-888s** - Be sure it has the Scramble feature listed in the description. **Get the improved antenna listed below** and a spare battery, more MAH is better on the battery. This radio is primarily for an inexpensive radio with the scramble feature. If you break it you haven't lost much.

https://www.amazon.com/BAOFENG-BF-888S-Transceiver-Illumination-Flashlight/dp/B014DLYNFO/ref=sr_1_7?ie=UTF8&qid=1473811437&sr=8-7&keywords=BF-888s+Scramble

- **Dual Band Radio** – From the VHF/UHF list. More power is better. The Baofeng 8 watt mobile has more accessories and an extended battery available. **Get the Improved antenna listed below.** These radios provided many more frequencies, more power and more distance. There may be advantages to the weather proof models but limitation in accessories. Also weather proof models require a different headset connector. The headset and spare or extended batteries are important.

- **Microphone Ear Piece** of your choosing. These are harder to select because most have poor volume. Make sure it has the two pin configuration to fit the radio.

https://www.amazon.com/Acoustic-Earpiece-Headset-Baofeng-BF-888S/dp/B014DNCWUK/ref=sr_1_4?ie=UTF8&qid=1473810363&sr=8-4&keywords=baofeng+headset

You may have to modify one to get a workable headset.

This link is just to give you an example.

You will need some kind of carry case for your battle rattle for your radios.

- **Get your Ham Radio Tech License – Very Important.** Both of these radios will work with a license on FRS and GMRS freqs, however your comms will be



greatly enhanced with a ham license and the use of local repeaters.

- **For your Vehicle** – These radios will work well in your vehicle with an external antenna. A trunk mount NMO antenna mount, a Dual band antenna (Tram 1181), and a SMA female to SO239 adapter cable will help you get this installed. This will greatly enhance your mobile comm with these handheld radios.

https://www.amazon.com/coaxial-cable-female-SO239-PL259/dp/B00KQHH7VC/ref=sr_1_9?ie=UTF8&qid=1473811071&sr=8-9&keywords=sma+to+pl259+adapter

https://www.amazon.com/Amateur-Dual-Band-Antenna-140-170-Centimeters/dp/B0155CGHI6/ref=sr_1_1?ie=UTF8&qid=1473810972&sr=8-1&keywords=nmo+dual+band+antenna

https://www.amazon.com/1247-B-Maxtrac-CDM1250-CDM1550LS-connector/dp/B00NP7EYYS/ref=sr_1_1?ie=UTF8&qid=1473811233&sr=8-1&keywords=trunk+mount+nmo

A Mobile rig is far better as listed below. They offer far more power. A better antenna will be required. The Recommended handheld antenna will not be sufficient with over 10 watts of power, even though Tram appears to be rated for more power. I recommend a Quad Band Mobile Radio because it covers many bands, the TYT model covers more than four, only four are ham radio, it also covers CB, FRS, GMRS. All important capabilities. A Mobile rig is optional but HIGHLY Recommended. These also work very well in your ham shack I your house, if you wish to set one up.

- **HF Regional/National Comms (Optional)**

The GP-5 receiver listed below is a good HF receiver. You will be able to monitor state and national communications with a simple long wire antenna. OK National Comms are digital modes and require an input to your PC. A headphone jack will work with the appropriate cable. You will need the FREE FLDIGI software available online. There are great advantages to hearing HF comms even if you cannot transmit.

CPT Team - Individual Comm

- **Non-HAM – Baofeng BF-888S UHF Handheld**
– 16 Channel FRS – 1 to 4 Watts, 2-4 mile.
\$15.00 on Amazon. Pictured – When ordering this radio read the description and look for scrambler or encryption option in the description. Some of this model do not have this option. Only order the ones with the scrambler option.
 - **Antenna, Nagoya NA-717**, \$16.00
- **Ham Tech License – VHF/UHF**
 - **Baofeng UV-5R**, 5 Watt, UHF/VHR, \$25.00
 - **Baofeng BF-F8HP**, **8 Watt**, UHF/VHF, \$63.00
 - **Baofeng GT-3WP**, 5 watt, UHF/VHF, **Weatherproof**, \$55.00
 - **Baofeng BF-A58**, 5 Watt, UHF/VHF, **Waterproof IP57**, \$65.00
 - **TYT UV8000DE**, **10 Watt**, UHF/VHF, \$79.99
 - **Antenna, Nagoya**, **NA-771**, \$17.00



Local Mobile Comm

- **CB Radios – 5-10 mile**
- **Ham – Vehicle Mounted Quad Band** with cross band repeat, will extend team comms 10-50 miles.
Recommend the TYT TH-9800, Quad Band, \$223.00.
- **Antenna, Comet or Diamond Quad Band**, \$126.00. Needs a heavy duty mount.
 - **Ham – VHF/UHF Local and Regional repeaters.** W9WIN



Linked repeaters reach the South West corner of Indiana. Repeaters can extend range 50 miles on both side of the repeater.

- Technician Ham Radio License

- **The Antenna is the most important part of a radio.**

State, Regional, National Comm

- **HF Receiver – Country Comm GP-5**, \$80.00, Picture - <http://www.universal-radio.com/catalog/portable/0905.html>



- **HF Radio**

- **Yaesu Ft-450D**, 100 Watts, all mode, \$699.00, pictured
- **Alinco Dx-SR8t**, 100 Watts, all mode, \$499.95



- **Antenna**
 - **Buxcomm Windom OCF**, 80m All Band, No tuner, 2000 Watts Pep, \$159.00. 137 feet end to end https://packetradio.com/catalog/index.php?main_page=product_info&cPath=49&products_id=2704&zenid=d2aec518eb7ae7de1d2dbbe1114106ee
 - **An Inverted L for small locations.** The inverted L only requires 30 foot of horizontal space and about 33 foot of elevation. Most yards will accommodate this 80m antenna. It also requires tuner.
 - A simple homemade 80m dipole works very well, with or without an external tuner, depending on your radio.
- **Power Supply, Samlex-1235m**, \$130.83
- **HF Amp** – An HF Amplifier can make all the difference in getting through when bands are bad. We are currently in a portion of the sun spot cycle where the bands are often bad and will be for the next couple of years. Therefore, an HF Amp can mean the difference in

being heard or not being heard. RM Italy makes some great inexpensive amps. One of our HAE operators owns and uses an RM Italy KL-506.

<http://www.rmitaly.us/> . RM Italy makes a number of different amps at reasonable prices be sure to get one that covers the whole HF Band, or at least most of it. These amps are made in Italy and tech Support is very difficult in the USA. However, they are priced within reason. You may want to get an amp that has fans on it. Such as the KL 505V.



- **Digital Modes for National OK Comms**
 - **Receive, A computer and FIDigi**, free download
 - **Send , Signal Link USB**, \$99.00

Communications Information

Grid Up

- **Signal** for secure texting, messaging, attachments, and voice – Signal by Whisper Systems. Find it in your app store.
- **Wicker** for secure texting
- **PGP** for secure email, hard to get set up.
- **Retro Share** for PC based messaging for PC - <http://retroshare.sourceforge.net/>

Grid Down

- **Channel 3 plan** – For CB, FRS, MURS. Try to make contact for 2 minute before and after every hour.
 - **Look for HAM radio operators in your local area.** How do you find them? Look for big antennas and long wires used for antennas
- **Comm Plan – Oath Keepers Comm Plan**
 - **Ham Radio** – Listen for “CQ, CQ, CQ, OVPA Group . . .”
 - VHF – Calling Freq – 146.420

- Voice – 14.345 USB (14.345-14.375) 45 min after every hour
 - Voice Secondary – 21.345 USB
 - Voice Alternate – 3.838 LSB
 - Voice Alternate – 7.238 LSB
 - Data – 14.120 USB, +1000, Contestia 4/250, 24/7 days
 - Data Secondary – 7.120 USB, +1000, Contestia 4/250, 24/7 days
 - Data Alternate – 3.585 USB, +1000, Contestia 4/250, 24/7 days
- **Receiving National and Regional Messages – Digital Packaging**
 - HF Receiver, good Antenna, PC, connection
 - **AMRRON and TAPRN** Nets are alternate sources similar to Oath Keepers. These are Prepper organizations with whom Oath Keepers works in agreement. <http://www.amrron.com/>

Ham Radio License

- **Technician UHF/VHF, General HF, Amateur Extra No Restrictions**
- **Gordon West Books**
- **ARRL study apps**
- **HAMRadioSchool.com Books**