

Transmitter Hunting

This is an event where enthusiasts get together and use various techniques to find hidden transmitters. There may be one or more transmitters during a hunt. The **fox**, which is the person hiding the transmitters, decides the locations and number of transmitters being used. Typically, there is one main transmitter and possibly several lower power transmitters within range of the main transmitter location.

There are several types of T-Hunts:

1. A **mobile** T-Hunt requires participants to drive to the location, or locations in order to find the transmitters. A typical hunt that C.A.R.P. hosts has the fox using a main transmitter that must be heard at the start location. Upon finding the main transmitter, there may be one or more lower power transmitters that must be found on foot.
2. An **on foot** T-Hunt may have all of the participants arrive at the hunt location, or take a short drive where they are told where to go, such as a park or public location.

Equipment

Transmitters - There are various types of transmitters from small to large.

Micro-Fox 15 is a 15 mw transmitter. \$75 (\$100 combo)

<http://www.byonics.com/mf>

PicCon is a micro controller that is connected to a transceiver. This is often connected to a radio that transmits a higher power and is the main transceiver. (\$42-\$66) <http://www.byonics.com/piccon/>

The radio you already own - Purchasing a micro transmitter is not a requirement to put on a hunt as a fox. The radio you own can be used and the fox can simply transmit via voice providing their call and giving a 10 - 20 count, or an equivalent transmit duration.

Attenuators - This is an essential tool for a T-Hunt. At times a signal may be very strong, so attenuation is needed to better focus the direction. Attenuation can be achieved in several ways.

1. Using a device that offers levels of attenuation.
2. Tuning off frequency more and more as proximity to the transmitter improves
3. Using a harmonic frequency such as the third and fifth harmonic of the main frequency.
 - A. 146.565 MHz - Main Frequency
 - B. 439.695 MHz - Third Harmonic
 - C. 732.825 MHz - Fifth Harmonic

C.A.R.P. T-Hunt

K6ARP.org

Antennas - One can purchase or make their own antenna. A directional antenna is definitely an advantage.

Elk Log Periodic - \$125 Dual band so easy to switch to third harmonic

Arrow - \$75 Can be dual band with additional elements and a duplexer.

Tape measure antenna - This low cost alternative can be made out of items using a tape measure, PVC pipe, wire, solder, and a connector to the radio.

Radio supplied antenna - Using the antenna that was provided with the radio, one can use a method called body fade. Holding the radio close to one's chest and listening to the signal increase and decrease can provide directivity. If the radio has a working signal meter, it will improve identification of the transmitter direction.