

TRANSMITTER/FOX HUNTING

K5QY

Types of Hunts

Typical Antennas

Equipment Used

Mobile Transmitter Hunts

- Mobile transmitter hunts are organized events where participants travel in motor vehicles.
- Most mobile transmitter hunts use VHF transmitters and receivers.
- Some participants use radio direction finding equipment and an antenna temporarily mounted on a vehicle. It can be easily rotated by hand while the vehicle is in motion.
- Some hunts also score the least mileage the winner.

Pedestrian Transmitter Hunts

- A regulated sport form of transmitter hunting by runners on foot is called Amateur Radio Direction Finding, known worldwide by its acronym, **ARDF**.
- It is an amateur sport that combines the skills of orienteering and radio direction finding. ARDF is a timed race.

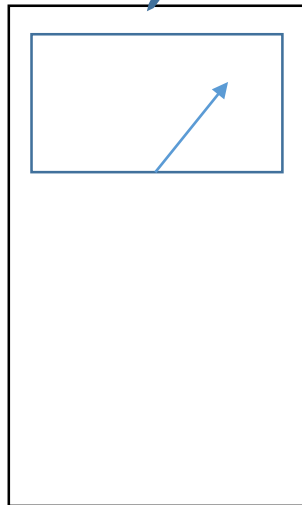
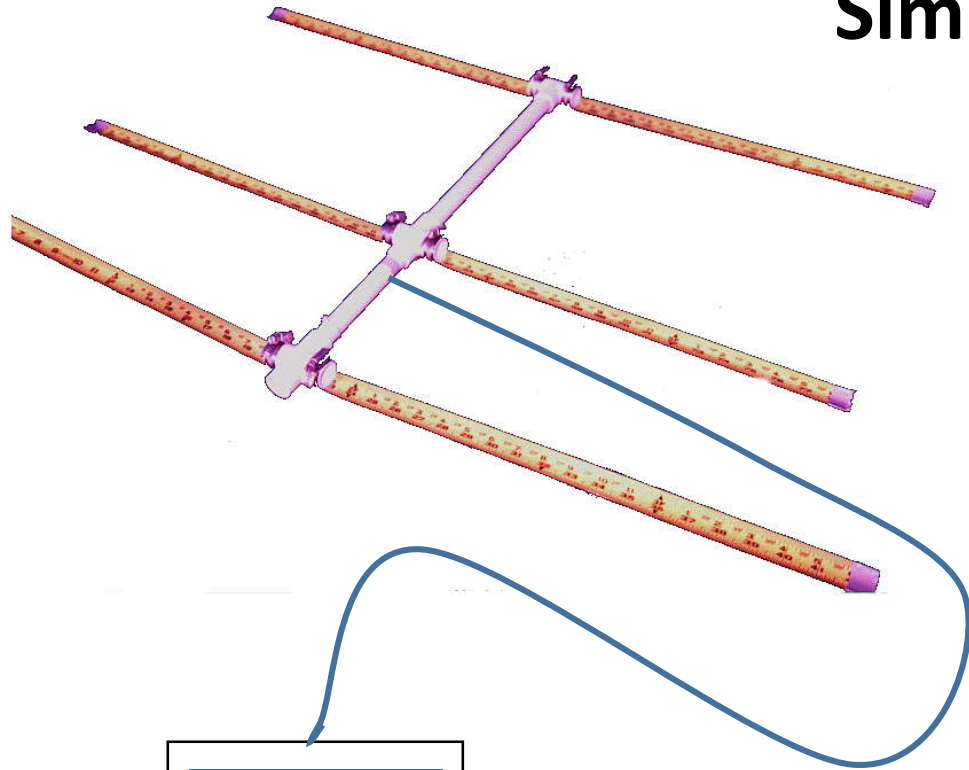


Fixed Location Transmitter Hunts

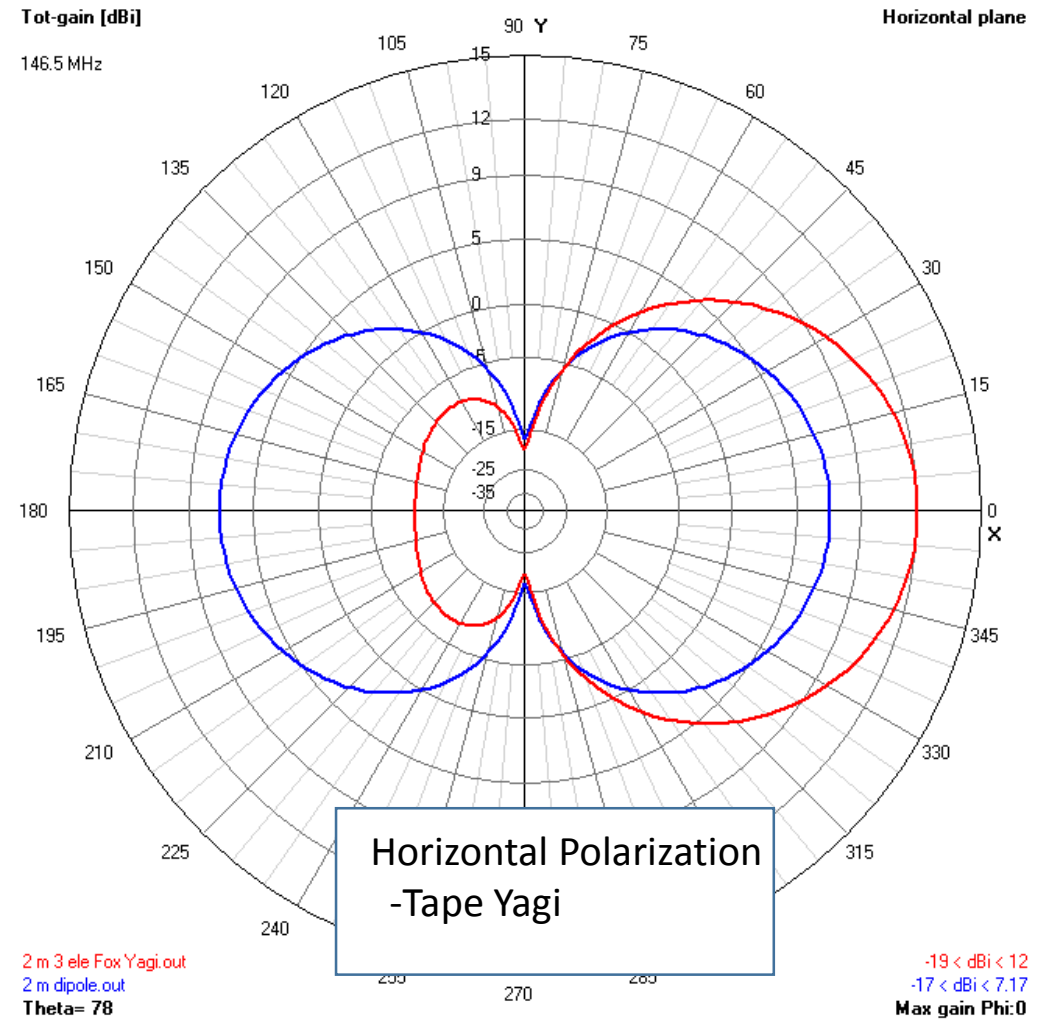
- Some transmitter hunts feature a "mail-in" competition, in which teams in fixed locations work together to locate hidden transmitters.
- Then give the coordinates to the organizers without actually traveling to the transmitter location. The team which provides the closest coordinates wins.



Simple Home Made Tape Yagi Antenna



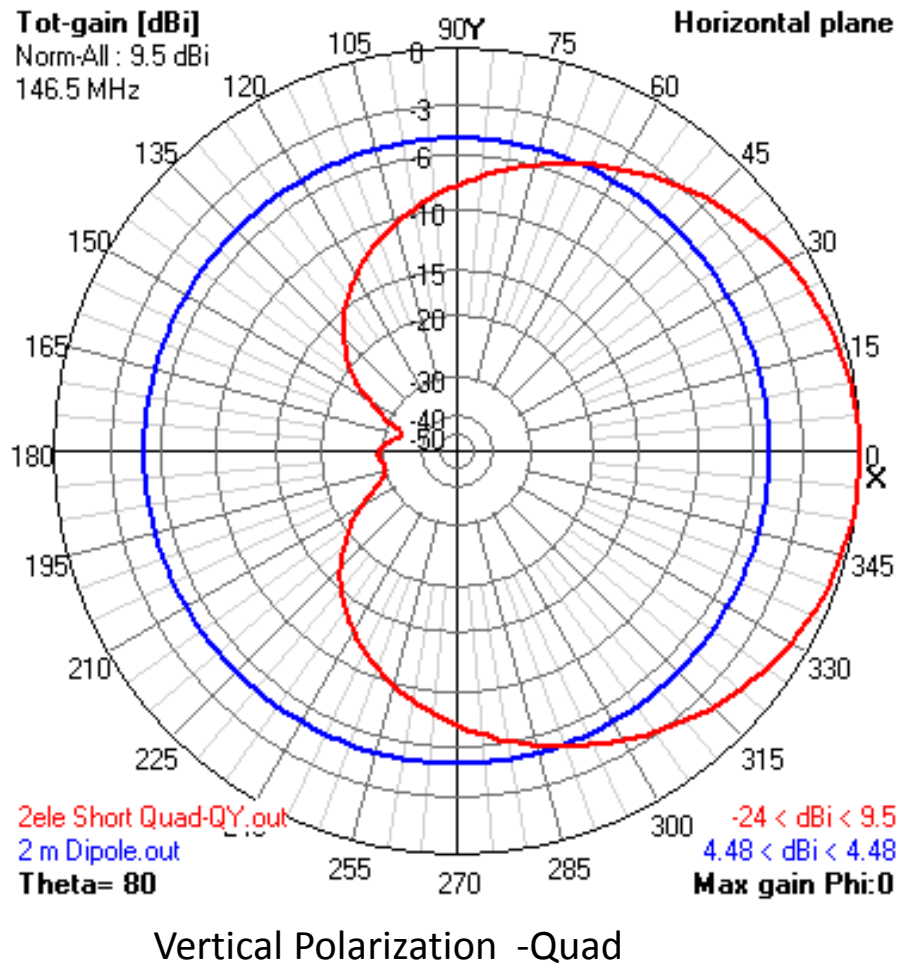
VHF Radio
with S-meter



Simplest Operation:

- When the signal is so strong that you can't find the direction, tune 5 or 10 KHz off frequency to put the signal into the skirts of the receiver's IF passband.
- If your hand-held is dual-band and you are hunting on two meters, try tuning to the much weaker third harmonic of the signal in the 70 cm band.
- Perform a "body shield" with the antenna.

Truck Showing a Temporary Mounted 2-meter Quad Antenna

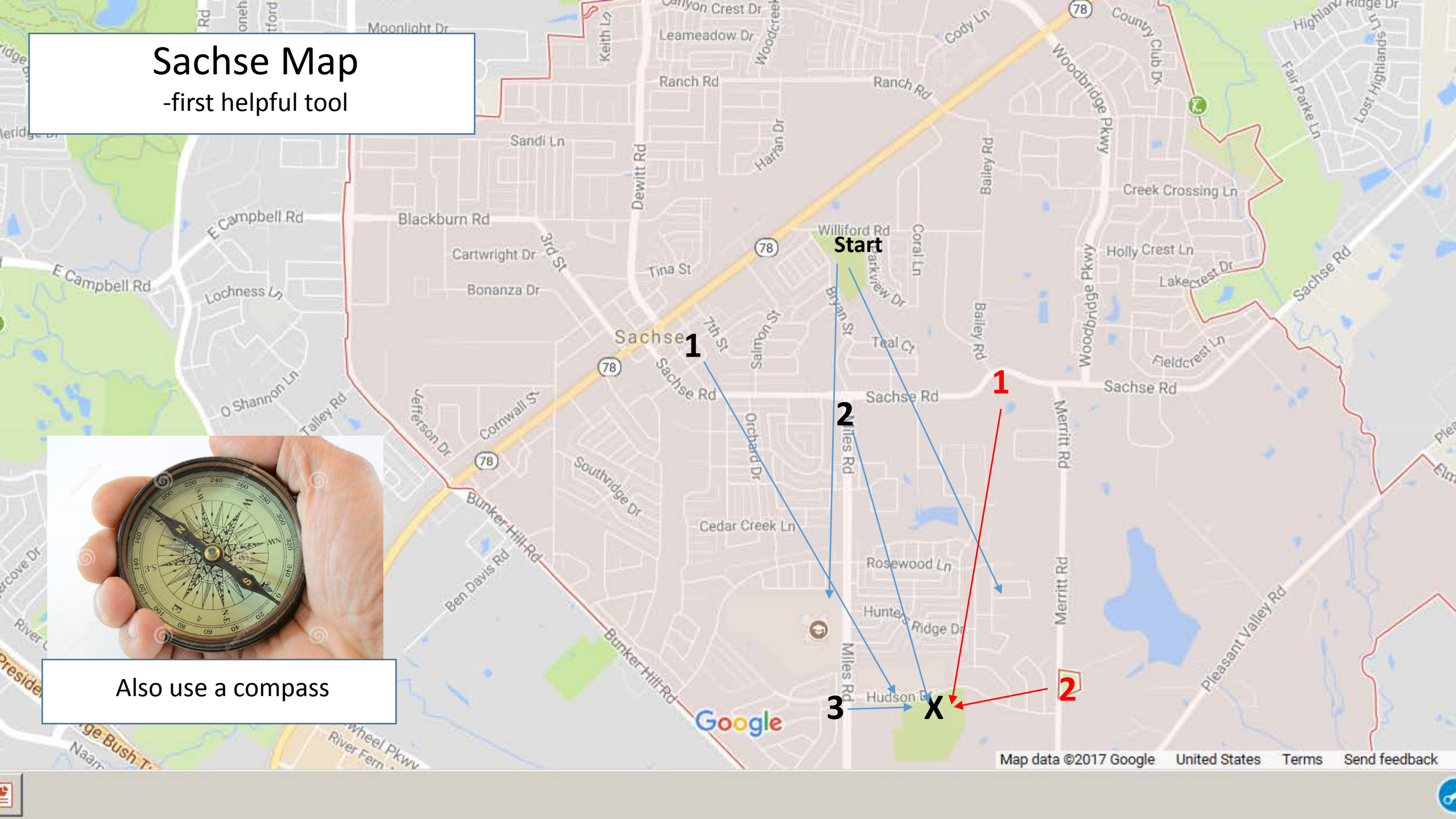


Sachse Map

-first helpful tool

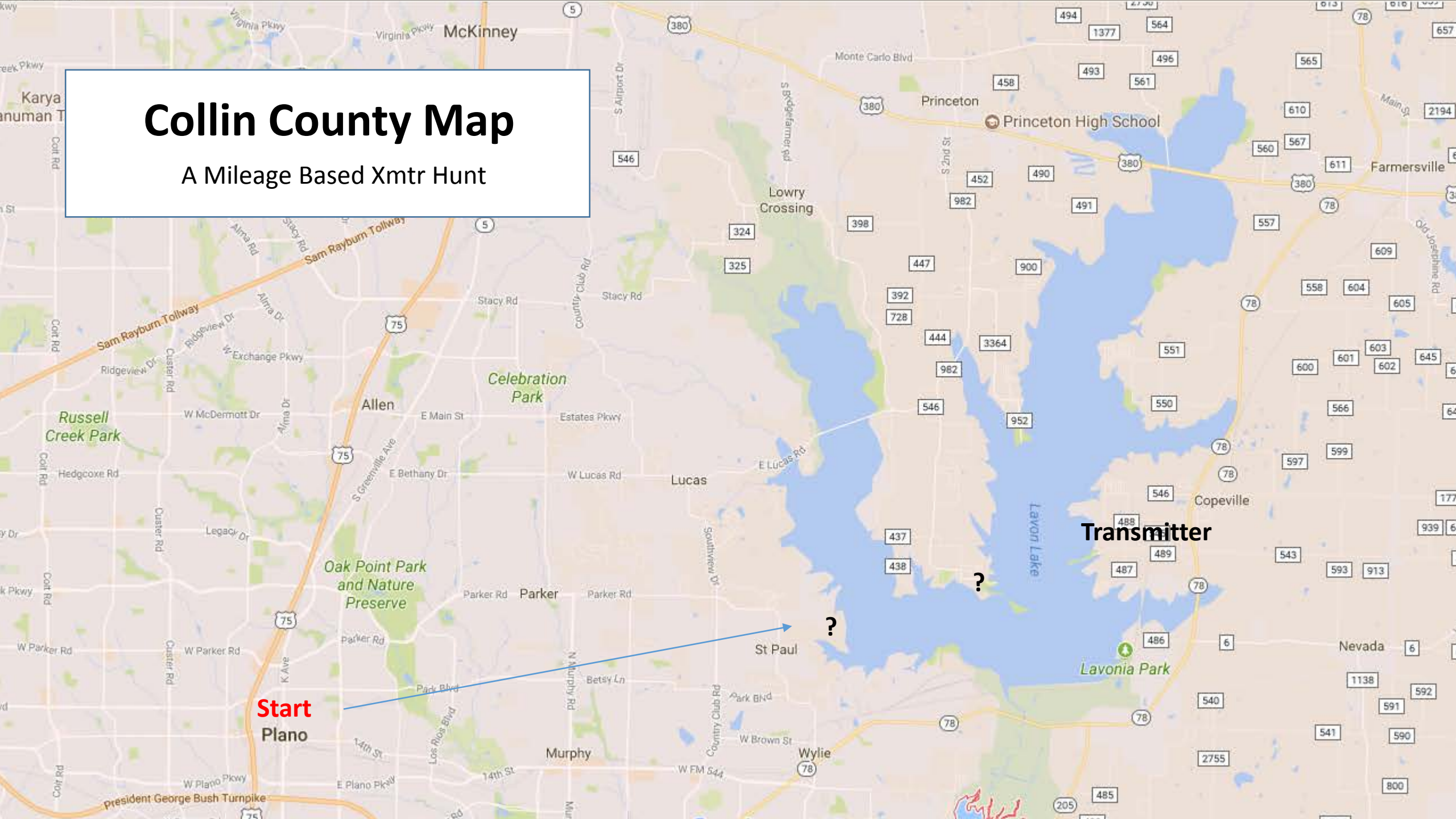


Also use a compass

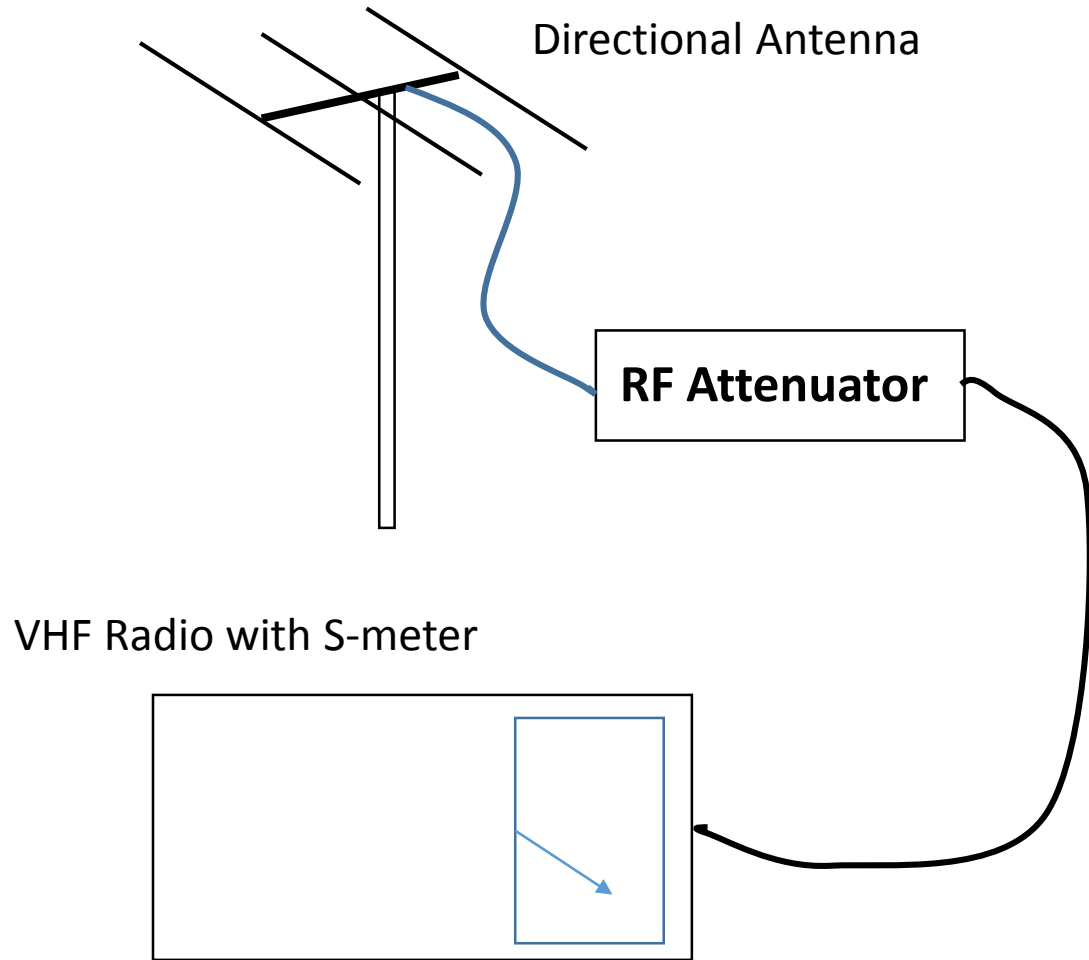


Collin County Map

A Mileage Based Xmtr Hunt

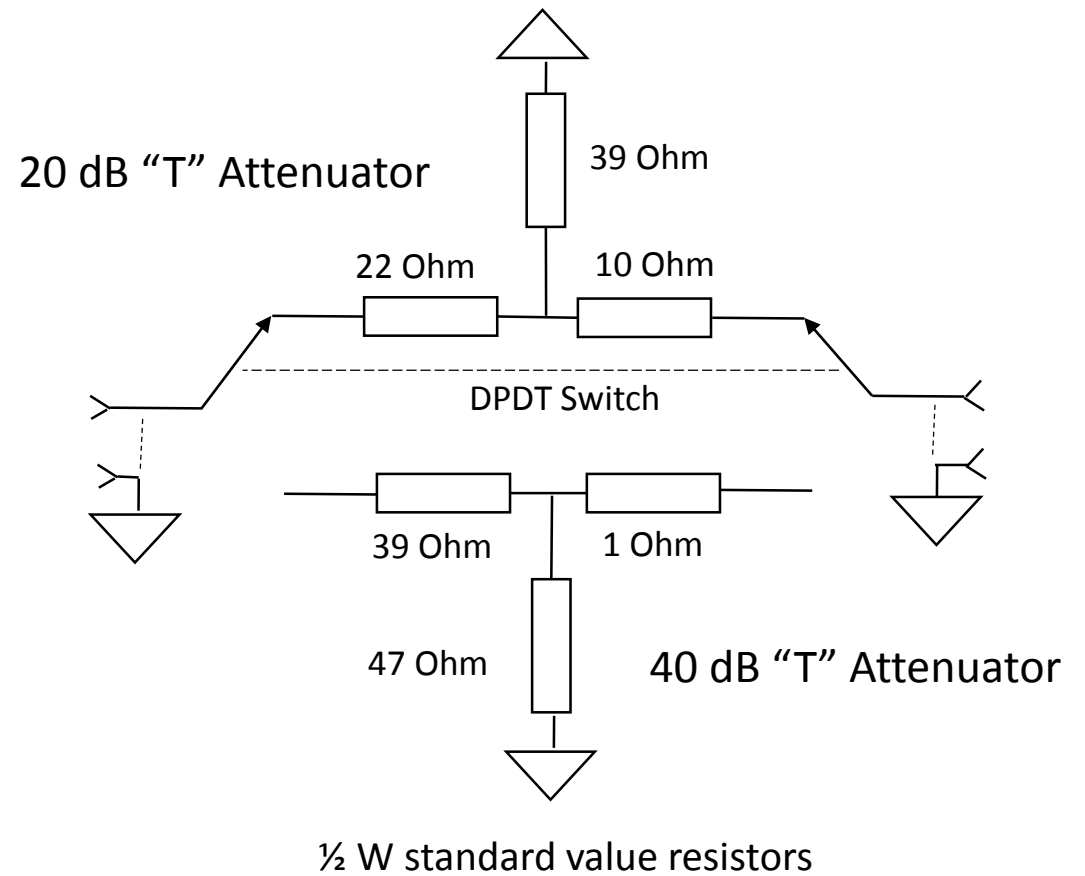


Adding an RF Attenuator Improves Operation:



Attenuators are used when approaching the near vicinity of a transmitter to keep the received signal strength within a usable S-meter range.

–Until the signal overloads the radio.

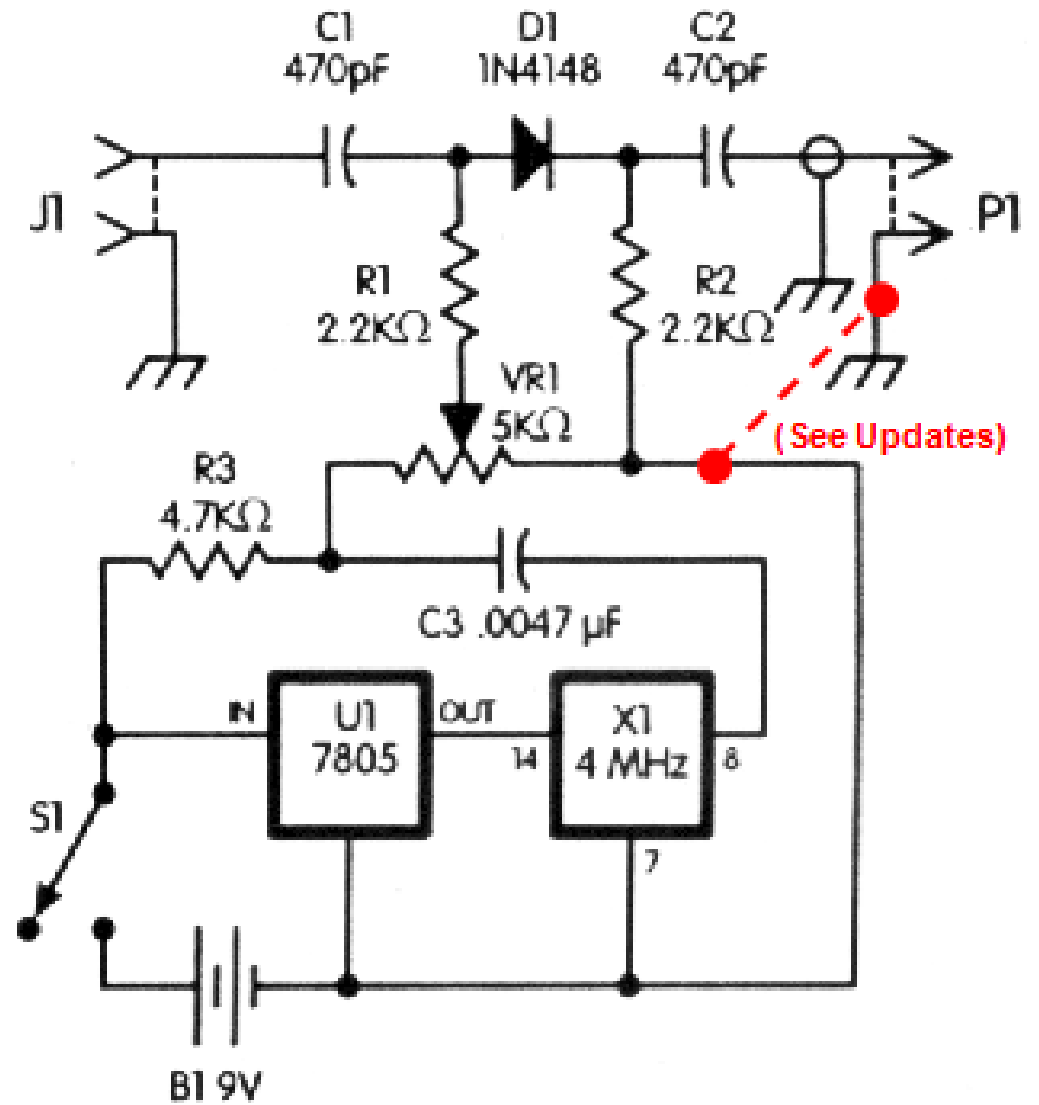
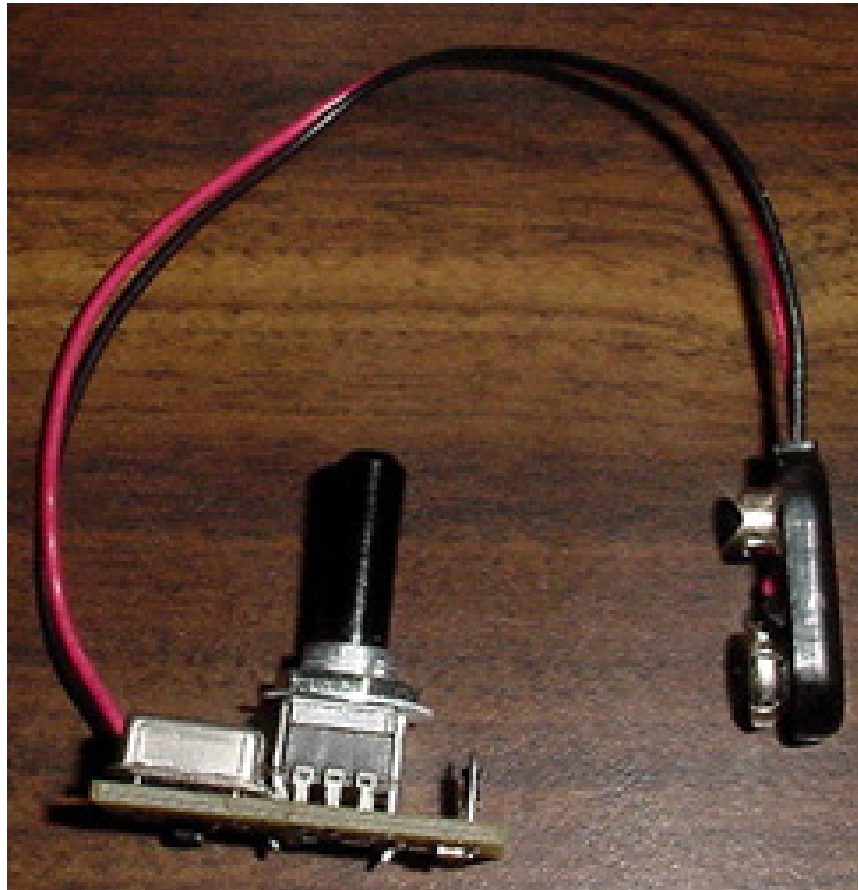


4-MHz OFF SET ATTENUATOR –Better attenuator

A better way to get bearings on nearby foxes with HTs is to convert the strong on-frequency signal into a weaker off-frequency signal. Then you can tune your receiver to the offset signal and measure its strength versus direction.

- Get bearings on the fox's frequency with **OFF SET ATTENUATOR** turned on. Start with the dial full clockwise, which is minimum attenuation (about 4 dB).
- Increase attenuation as necessary by turning the knob counterclockwise. When it reaches the stop, you have attenuated the signal about 20 dB.
- When this isn't enough attenuation, tune your receiver up or down to the first offset frequency. (Examples: $146.55 + 4.0 = 150.55$ or $146.55 - 4.0 = 142.55$)
- Return VR1 to full clockwise, which is the equivalent of about -30 dB, and continue the hunt, increasing attenuation as you approach.

K00V Offset Attenuator:

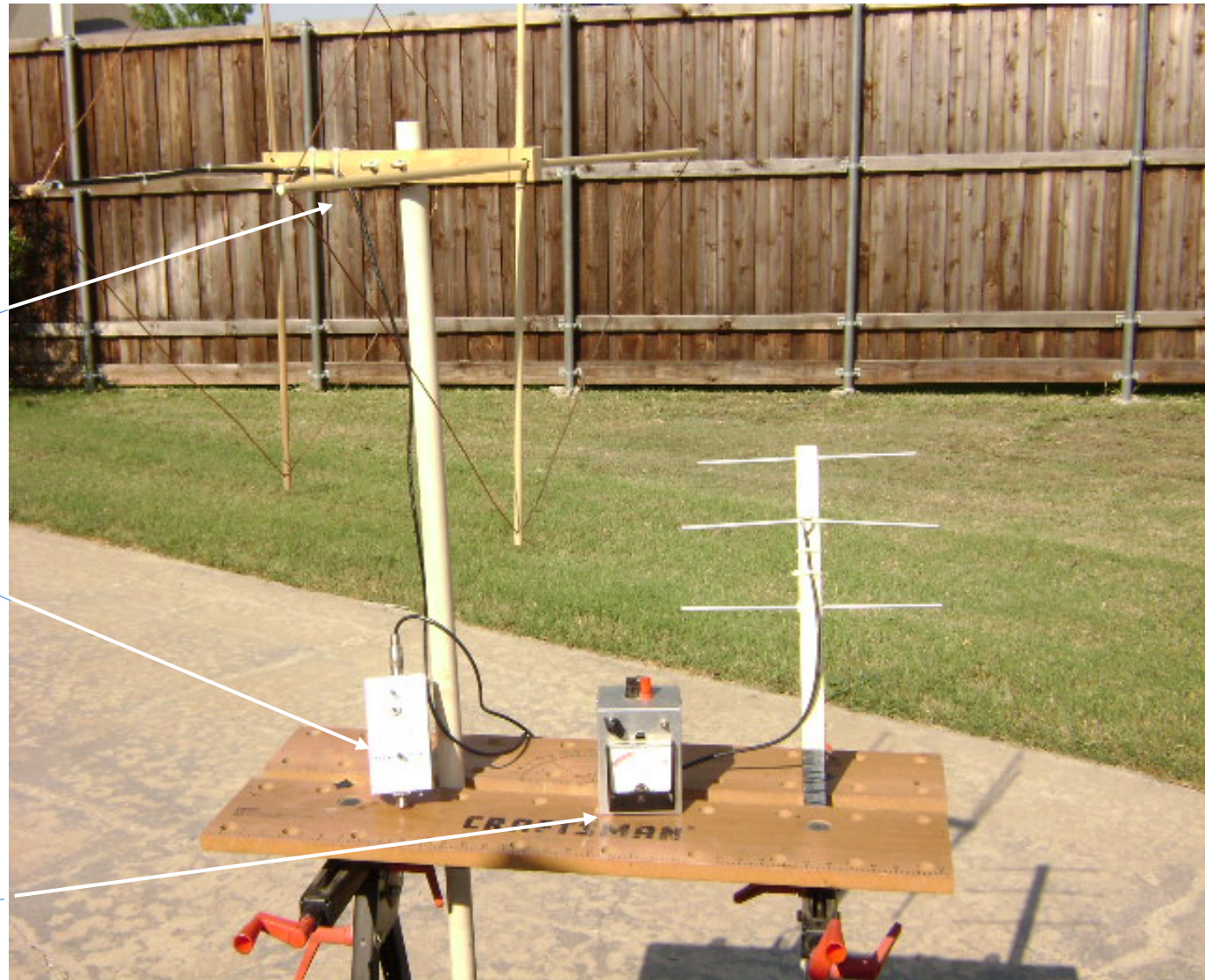


K5QY's Additional Equipment:

2-ele Quad on PVC mast

4-MHz Offset Attenuator

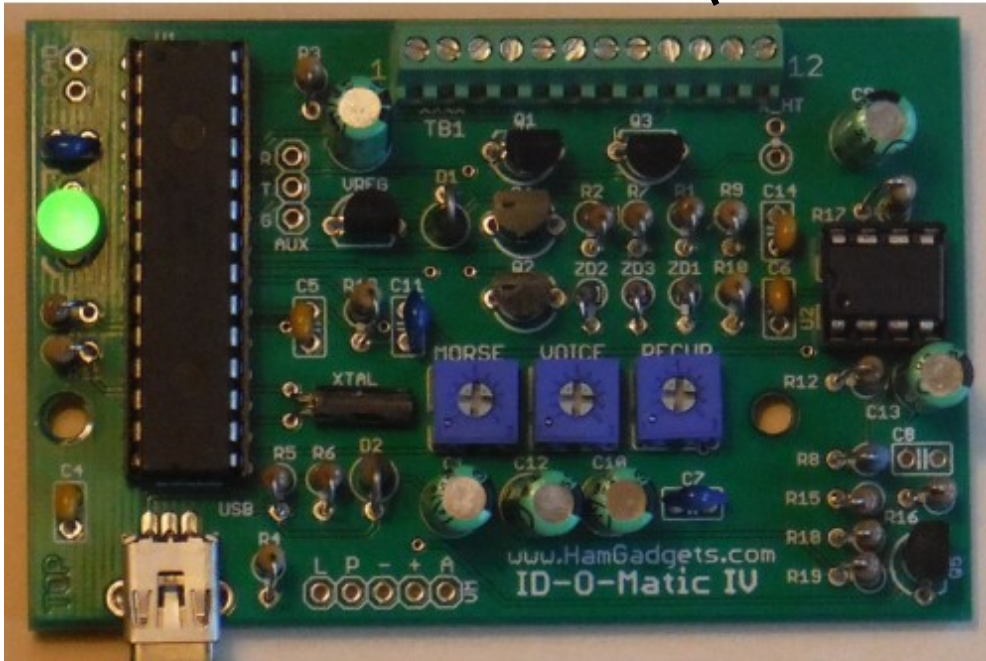
Simple Field Strength Meter
-For very close detection
(Ex: 3 handhelds within 30 ft)



Hidden Transmitters:

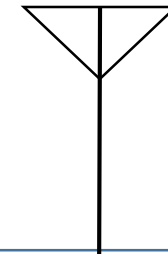
NOXAS ID-O-Matic II

Programmable ID timer/ Annunciator.
Controls a 2-meter transceiver.



Short Range Transmitter:

The Micro-Fox 15 is a 10-15 mW
T-Hunt transmitter capable of
transmitting on any 2-meter
frequency. It can be heard over
3 miles away.



2 m Transmitter



Good Luck



K5QY

