

HAM 2.0

Antennas

- Two general types – Dipole and dish antennas
- Used to transmit and receive electromagnetic waves
- Both come in all shapes and sizes

Dipole Antenna

- Invented by German physicist Heinrich Hertz around 1886 while experimenting with radio waves
- Dipole antennas are great for use with the lower frequency radio spectrum
- Usually the dipole has two lengths of wire that are cut to $\lambda/4$ to form a $\lambda/2$ antenna
- A Yagi antenna is a special type of dipole antenna that is directional. Instead of having two wires it has one and the other is replaced with a reflector.



This is a picture of the dipole antenna that we worked on during this project circle



Foxhole radio

- Very basic receiver used by soldiers during WWII
- No power source is needed to receive radio signals, power is supplied by the radio signal itself.

