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Team 10

Summary:

Thesis:

Demonstrate understanding of basic wireless principles by building a wireless antenna, using wireless radios, and receiving wireless communications.

Public radio and Ham radio are seeing a revival as a hobby since the removal of Morse code and the introduction of very cheap Chinese radios in to the US market. We demonstrate understanding of basic wireless principles by building a wireless antenna, using wireless radios, and receiving wireless communications. Everyday several many public domain satellites fly overhead without most people knowledge of how to listen to what they are saying. This project will avoid licensing requirements for UHF/VHF spectrum by scanning and receiving only. Many of these older satellites use UHF and VHF for uplink and downlink communications and the research portion will cover finding this information. The cheap radios are not easy to use and require programming to the correct frequencies. This will require studying how these radios work. Research on various antenna technologies and selecting one that will work for accessing overhead satellites.

To pick up the communication from satellites requires building an antenna. By building an antenna we can show our understanding and collect a recording to play for the rest of the class. Simple Yagi antennas have already been shown to good for picking up VHF/UHF singles. It's one the main reasons why people have them on their house for TV. We will bring in the resulting antenna to show the class and talk about the antenna and how it works.