### **Cub Scout Requirements Related to Radio**

**Tiger** - Curiosity, Intrigue, and Magical Mysteries (Elective)

- 4. Create a secret code.
- 5. With the other Scouts in your den or with your family, crack a code that you did not create. (Consider using Morse code for this)

**Wolf -** Howling at the Moon (Required)

1. Show you can communicate in at least two different ways.

(Consider using radio or Morse code for this)

Bear - None found

**Webelos -** Stronger Faster Higher (Required)

6. Try a new sport you have never tried before. (Consider using Foxhunting for this)

### Engineer (Elective)

- 1. Pick one type of engineer. With the help of the Internet, your local library, or a local engineer you may know or locate, discover and record in your book three things that describe what that engineer does. (Be sure to have your Webelos den leader, parent, or guardian's permission to use the Internet.) Share your findings with your Webelos den.
- 2. Learn to follow engineering design principles by doing the following:a.
- a. Examine a set of blueprints. Using these as a model, construct your own set of blueprints or plans to design a project.
- b. Using the blueprints or plans from your own design, construct your project. Your project may be something useful or something fun.
- c. Share your project with your Webelos den and your pack by displaying the project at a pack meeting.
- 3. Explore other fields of engineering and how they have helped form our past, present, and future
- 4. Pick and do two projects using the engineering skills you have learned. Share your projects with your den, and also exhibit them at a pack meeting.

(Consider using Electrical Engineering for this and building a simple code practice oscillator, crystal radio or other electronic device as a project)

**Arrow of Light** - Building A Better World (Required)

10 d. Under the supervision of your parent, guardian, or den leader, connect with a Scout in another country during an event such as Jamboree on the Air or Jamboree on the Internet or by other means.

Also, see the Webelos Engineer elective which can also be used for Arrow of Light.

BSA - INTERNATIONAL SPIRIT AWARD (Cubs, Scouts, Adults) Participate in Jamboree-on-the-Air or Jamboree-on-the-Internet.

### Scouts BSA Requirements Related to Radio

### **Aviation Merit Badge**

- 2 e. Explain the purposes and functions of the various instruments found in a typical single-engine aircraft: attitude indicator, heading indicator, altimeter, airspeed indicator, turn and bank indicator, vertical speed indicator, compass, navigation (GPS and VOR) and communication radios, tachometer, oil pressure gauge, and oil temperature gauge
- 4 b. Visit a Federal Aviation Administration facility—a control tower, terminal radar control facility, air route traffic control center, or Flight Standards District Office. (Phone directory listings are under U.S. Government Offices, Transportation Department, Federal Aviation Administration. Call in advance.) Report on the operation and your impressions of the facility.

## Citizenship In the World Merit Badge

- 7. Do TWO of the following (with your parent's permission) and share with your counselor what you have learned:
- e. Participate in or attend an international event in your area, such as an ethnic festival, concert, or play. (JOTA counts for this and should be specified)

# **Electronics Merit Badge**

(c) Choose ONE of the following three projects. For your project, find or create a schematic diagram. To the best of your ability, explain to your counselor how the circuit you built operates.

A control device - A digital circuit - An audio circuit

A radio circuit (This option should be added)

# **Emergency Preparedness Merit Badge**

- 7. Do the following:
- (a) Take part in an emergency service project, either a real one or a practice drill, with a Scouting unit or a community agency. (Field Day can count for this)
- 8. Do the following:
- (a) Tell the things a group of Scouts should be prepared to do, the training they need, and the safety precautions they should take for the following emergency services:
- (2) Messenger service and communication

### **Engineering Merit Badge:**

6 c Understanding electronics.

Using an electronic device such as a mobile telephone or portable digital media player, find out how sound travels from one location to another. Explain how the device was designed for ease of use, function, and durability.

Radio Merit Badge - Obviously everything.

#### **Space Exploration Merit Badge**

- 4. Discuss and demonstrate each of the following:
- d. How satellite pictures of Earth and pictures of other planets are made and transmitted

BSA - INTERNATIONAL SPIRIT AWARD (Cubs, Scouts, Adults)

Participate in Jamboree-on-the-Air or Jamboree-on-the-Internet.