

HAM RADIO STATION VISIT

Objectives

- Help the scout prepare to fulfill the following merit badge requirements (most of these requirements will be passed off in a subsequent class):
 - 8.a. Visit a Ham Radio station.
 - 8.b. Discuss what types of equipment you saw in use and how it was used.
 - 8.c. Discuss what licenses are required to operate and maintain the equipment.
 - 8.d. Discuss the purpose of the station.
 - 7.a.1. Describe some of the activities Amateur Radio operators can do on the air.
 - 7.a.6.a. Discuss handheld transceivers versus home “base” stations.
 - 7.a.6.b. Explain the uses of mobile amateur radio.
 - 2.b. How do WWV and WWVH help determine what you will hear on radio?
- Demonstrate to scouts some of the operational aspects and capabilities of Amateur Radio and what fun it is.
- This visit will help prepare the scouts for the radio contact they need to make.

Reference Materials

- Handouts: WWV and WWVH Broadcast Stations. (Depending on order classes are taken, scouts may already have this.)

Suggested Activities

- Point out and discuss the uses of the equipment in the base station including:
 - HF transceiver - Include power supply, antenna selection switch, antennas, microphone, speaker, earphones and CW key
 - VHF transceivers - Include power supplies, antennas, microphone, speaker
 - UTC clock
 - Log book
 - Copy of FCC regulations, ARRL Operating Manual, ARRL Handbook.
- Show a couple of handheld transceivers (HT's)
- Tour and discuss mobile amateur radio station
- As you discuss each radio, use the Icom band chart to show which frequencies they operate on and what license class is required to operate them.
- Listen to each radio and actually use each type of radio to make a few contacts, if practical.
- Listen to the WWV and WWVH time stations on several frequencies.
- Demonstrate CW – actual contact would be nice, but a couple of operators just sending to each other in the shack would be OK .
- Show some of the QSL cards we have received.
- So the scout can meet the “maintain” portion of requirement 8.c, you might comment that: While the FCC requires a special license to service and maintain commercial broadcast equipment, that is not required for Amateur Radio equipment. Thus, a Ham can build his own equipment, and maintain and service his own equipment. He can also get anyone he feels is qualified to service his equipment.

Signing Off the Scout's Completion of Visit Requirement

- At the completion of the visit, sign the scout's record sheet for requirement 8.a. The other requirements will be reviewed and signed off in another class.