

# SS&S Chapter 16 Instructor Guide

## Your Boat's Radio

The PowerPoint (PPT) slides for this SS&S chapter were copied from the BS&S-13<sup>th</sup> Ed PPT because they are identical. Only the chapter numbers have been changed. Therefore, the Instructor Guide notes remain in the same format as published for the BS&S which are slightly different from the sailing chapters.

### Slide 1: Title Slide

Instructor:

Student:

### Slide 2: Lesson Objectives

Instructor:

Student:

(click to show bullets)

Review the objectives

### Slide 3: Communications on the Water/Coastal and Inland

Instructor:

Student:

(click to show bullets)

Ask: What are the pros and cons of VHF radios, Citizen Band radios and cell phones?

Answers should include:

#### 1. VHF

- Great for getting help
- Limited to line of sight
- Hand held – less powerful
- Talk to other boaters
- Rugged and waterproof

#### 2. CB

- Inexpensive
- Good on lakes/rivers
- Short range
- Emergency backup for VHF
- Static sensitive

#### 3. Cell phones

- Good for emergency
- Limited range
- Calls often drop
- Limited tracking ability by USCG
- No assistance from other boaters

#### **Slides 4: Communications on the Water/Offshore**

Instructor:

(click to show bullets)

Discuss bullets.

Student:

If available, bring an EPIRB to show portability of unit.

#### **Slide 5: Function of Radio Telephones**

Instructor:

(click to show bullets)

Ask: Who recalls the three functions of the VHF and SSB marine radios?

Student:

Answers should include:

- Safety messages
- Operational messages
- Commercial messages

#### **Slide 6: Licenses**

Instructor:

(click to show bullets)

Discuss bullets.

Student:

Discuss the need for ship station license for SSB radio, where and how to obtain paper work for obtaining license and cost.

Discuss the restricted radiotelephone operator's permit requirements when docked in foreign ports.

### **Slide 7: Selecting Your VHF-FM Radio**

Instructor:

(click to show bullets)

Ask: What are the pros and cons of the Global Maritime Distress and Safety System available in fix-mounted VHF radios manufactured since 1999?

Student:

Answers should include:

- Uses channel 70 for distress calls
- MMSI provides vital boat info.
- Can provide position info when interfaced with GPS
- Operator can handle emergency while distress info is being sent

Discuss how to obtain MMSI number

### **Slide 8: Selecting Your VHF-FM Radio**

Instructor:

(click to show bullets)

Discuss each bullet showing differences when using handheld versus fixed-mounted radio.

Stress differences in 1 watt power versus 5 watt power (max for hand held) vs 25 watt (max for fixed). Both utilize a 1 watt low power.

Student:

### **Slide 9: Selecting Your VHF-FM Radio**

Instructor:

(click to show bullets)

Stress channels to use for recreational boaters and which are blocked for government use.

Stress changing from calling channel to a working channel.

Student:

### **Slide 10: Installation**

Instructor:

(click to show bullets)

Ask: What are some important considerations when installing a VHF radio and antenna?

Student:

Answers should include:

- Do not try to repair or adjust
- Do not mount near compass
- Positive lead from battery goes to positive terminal of radio.
- Use proper antenna.
- Place as high on boat as possible.
- Allow enough room for you to lay the antenna down.

### **Slide 11: Operating Your VHF-FM Radio**

Instructor:

(click to show bullets)

Ask: What are the important caveats to remember when using a marine radio?

Student:

Answers should include:

- No false distress messages
- No obscenity
- Observe confidentiality
- Do not use when boat is on land
- Shift from calling to working station
- Practice correct radio terminology
- Speak slowly and distinctly

### **Slide 12 Operating Your VHF-FM Radio**

Instructor:

(click to show bullets)

Student:

Discuss importance of each. Stress the use of channel 16, 9, 6, 13 and WX channels.

### **Slide 13: Copies of the Rules**

Instructor:

(click to show bullets)

Student:

Discuss where copies of the rules may be obtained.

Rules violations

- Written notice
- Stop using radio until fixed
- May revoke license

### **Slide 14: Calling Another Station**

Instructor:

(click to show bullets)

Student:

Review the proper pro words to use when calling.

Suggested activity – bring in two or more Family Radio Service (FRS) units. Divide the class into small groups. Demonstrate the proper calling procedures. Have students in groups practice calling the other group on the FRS radio.

### **Slide 15: Phonetic Alphabet**

Instructor:

(click to show bullets)

Student:

Review the phonetic alphabet and numbers.

### **Slide 16: Distress, Urgency, and Safety Calls**

Instructor:

(click to show bullets)

Discuss:

- Circumstances under which is used
- Proper information for MayDay
- What to do if you hear a distress call.
- Imposing silence
- How to send an Urgency call
- How to send a Safety message.

Student:

### **Slide 17: Crew Training**

Instructor:

(click to show bullets)

Ask: Why is it important for a crewmember to be familiar with how to operate the radio?

Student:

Answers should include:

- In case the skipper has an emergency and needs help
- Skipper becomes incapacitated
- Will understand the Distress Communication Form to use.