

SS&S Chapter 5 Instructor Guide

Equipment for Your Boat

The PowerPoints (PPT) slides for this SS&S chapter were copied from the BS&S-13th 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

(click to show bullets)
Review the objectives

Slide 3: Requirements for Your Boat

Instructor:

Student:

(click to show bullets)
Ask who can explain the difference between a documented and a registered vessel

Answer should include:
Documented – 5 tons or more, foreign travel, U.S. citizen

Registered – in state of principle use
all states require this
Know your state's requirements

Slides 4 - 6: Requirements for Your Boat

Instructor:

Student:

(click to show bullets)

Divide the class into 4 groups:

Group 1 – design the numbers correctly

Group 2 – design the HIN and show where to place on boat

Group 3 – design a capacity plate and show where it is located

Group 4 – design the manufacturer’s compliance certificate and show where it is located

Allow 4-5 minutes and then have them present each

Slide 7: Requirements for Your Boat (Length)

Instructor:

Student:

(click to show bullets)

Label a boat with the following terms:

Bowsprits, diving platform, boomkins pulpits centerline

Have the students discuss how the boat is measured.

Slide 8: Fire Prevention and Detection

Instructor:

Student:

(click to show bullets)

Ask what the best way is to detect gas fumes.

Answers should be to use your nose and if fumes are present do not start engine. Stress that fumes are heavier than air and will settle in bilge.

Slide 9: Fire Prevention and Detection

Instructor:
(click to show bullets)

Ask what the two types of ventilation systems are.

Student:

Answers should be
“natural” and “powered”
Ask students what the
differences are.

Slide 10: Fire Prevention and Detection

Instructor:
(click to show bullets)

Discuss how the backfire flame arrester works.

Demonstrate using a candle and a kitchen tea or flour strainer. Light the candle, and slowly place the strainer over the flame. This uses the same principle as the backfire flame arrester. Discuss how the screen must be cleaned so it will work properly.

Student:

Slide 11: Fire Prevention and Detection

Instructor:
(click to show bullets)

Ask what the primary source of carbon monoxide poisoning is and how it can be prevented.

Student:

Answers should be from
generators. Solution is to
turn off all engines when
activities are in progress
on the stern of the boat

Slide 12: Fire Extinguishers

Instructor:
(click to show bullets)

Student:

Discuss which boats are required to have fire extinguishers.

For answers refer to table 2-2 (p 41) and fig. 2-9 (p 37)

Slide 13: Fire Extinguishers

Instructor:
(click to show bullets)

Student:

Ask what the elements of a fire are.

Answers should be oxygen, heat and fuel. Stress that the removal of one of these elements will suppress the fire.

Slide 14: Types of Fire

Instructor:
(click to show bullets)

Student:

Discuss each type of fire with students

Slide 15: Types of Fire

Instructor:
(click to show bullets)

Student:

Ask what materials are in a fire extinguisher.

Answers should include dry chemicals aqueous foam carbon dioxide

Stress the advantages of each and which type of fire each extinguishes.

Slide 16: Fire Extinguishers

Instructor:
(click to show bullets)

Must be Coast Guard approved.

Student:

If possible, bring a fire extinguisher and show where the nameplate is located and what information is on it.

Slide 17: Fire Extinguishers

Instructor:
(click to show bullets)

Ask the students to name 3 things that are important to check on a fire extinguisher.

Student:

Answers should include:
proper pressure
weight and tag
pressure indicator

Show how to turn upside down and hit the base to loosen caked chemicals

Slide 18: Fire Extinguishers

Instructor:
(click to show bullets)

Ask for a volunteer to demonstrate how to properly put out a fire. Stress – pull pin, aim, start at base of fire, sweep from side to side.

Student:

Slide 19: Life Jacket

Instructor:
(click to show bullets)
Must be Coast Guard approved.
Make sure they fit properly.

Student:

Discuss the importance of everyone on the boat having a life jacket.

Slide 20: Type 1 Life Jacket

Instructor:
(click to show bullets)

Student:

If possible bring a sample of the type 1 life jacket.
Have a style show to involve the students. Have them try on each type of life jacket. Stress proper fit and discuss advantages and disadvantages of each.

Slide 21: Type II Life Jacket

Instructor:
(click to show bullets)

Student:

Discuss chart with students.

Slide 22: Type III Life Jacket

Instructor:
(click to show bullets)

Student:

Discuss chart with students.

Slide 23: Type IV Device

Instructor:
(click to show bullets)

Student:

Discuss how to properly throw the Type IV

Slide 24: Type V Flotation Device

Instructor:
(click to show bullets)

Student:

Discuss the use of this special device.

Slide 25: Life Jackets

Instructor:
(click to show bullets)

Student:

Discuss the legal requirements with the students

Slide 26: Life Jackets

Instructor:
(click to show bullets)

Student:

Ask the students what is the importance of each of the bullets. Stress that it is especially important for children to practice being in the water while wearing the life jacket.

Slide 27: Life Jackets

Instructor:
(click to show bullets)

Student:

Discuss each bullet with students.

Slide 28: Sound Producing Devices

Instructor:
(click to show bullets)

Student:

Discuss chart with students.

Slide 29: Visual Distress Signals

Instructor:
(click to show bullets)

Student:

Discuss chart with students.

Slide 30: VDS – Non-Pyrotechnic

Instructor:
(click to show bullets)

Student:

Discuss with students what should be used during the day and what should be used at night.

Slide 31: VDS – Pyrotechnic

Instructor:
(click to show bullets)

Student:

Discuss chart with students.

Slide 32: Marine Sanitation Devices (MSD)

Instructor:
(click to show bullets)

Student:

Ask students if they have an MSD on their boat.
Discuss symbol for pump out station.

Slide 33: EPIRB

Instructor:
(click to show bullets)

Student:

Ask class what the advantages of the EPIRB are.

Bring EPIRB to class if possible.

Slide 34: Additional Equipment

Instructor:
(click to show bullets)

Student:

Ask what the advantages are of having these on board their boat.

Slide 35: Skipper's Responsibilities

Instructor:
(click to show bullets)

Student:

Slides 35-42 are covering material in Appendix A (page 411). Discuss each of the Skippers duties.

Slide 36: Alcohol and Drugs

Instructor:
(click to show bullets)

Student:

Discuss the effects while being on the water.
Discuss the 1/3 rule – one can of beer on land equals 3 cans on the water. Ask students what causes this.

Answers could include movement of boat, UV rays, noise.

Discuss the minimum BAC of 0.08%
Stress ZERO tolerance of alcohol and drugs while boating.

Slide 37: Speed Regulations

Instructor:
(click to show bullets)

Student:

Ask what determines a safe speed on the water?

Answers should include: visibility, traffic density, maneuverability of the boat, wind and sea state.

Slide 38: State and Local Regulations

Instructor:
(click to show bullets)

Student:

Ask what types of state and local PWC regs should you know?

Answers should include:
Kill switch on PWC
Speed and wake regs
operator license
rear view mirror
towing a skier
age requirements for operating a vessel
PWC ops requirements

Slide 39: Law Enforcement/HLS

Instructor:
(click to show bullets)

Student:

Discuss the chart

Slide 40: Pollution Control

Instructor:
(click to show bullets)

Student:

Ask the students what is the boater's responsibility in oil spills?

Ask what vessels must display the Discharge of Oil Placard?

Distribute placards to those who have vessels over 26'.

Slide 41: Dumping Regulations

Instructor:
(click to show bullets)

Student:

Discuss the importance of dumping regulations

Slide 42: Marpol Agreement

Instructor:

Student:

Discuss chart