SS&S Chapter 8 Instructor Guide

The Rules of the Nautical Road

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 2-3: Lesson Objectives

Instructor:
(click to show bullets)

Review the objectives

Student:

Slide 4: Two Sets of Rules

Instructor:
(click to show bullets)
Ask the class why we need Nav. Rules

Student:

Answers should include:

- Prevent collisions
- Know which way to go
- Safety

Stress that the rules apply to all vessels on navigable waters in U.S. Do not assume all boaters know and follow rules.

Slides 5: Two Sets of Rules

Instructor:
(click to show bullets)
Bring several copies of the Nav Rules. Show how the International Rules are on the left side and Inland Rules on the right. Show the Annexes. Show the COLREGS Demarcation lines and how to locate. Describe any rules applicable to your local area.

Student:

Slide 6: Two Sets of Rules

Instructor:
(click to show bullets)
Ask what is the purpose of demarcation lines?

Student:

Answers should include:

- Separate International and Inland waters.
- Marked by Magenta lines on a chart.

Bring in a chart of your local area (if applicable) or a 1210 Training Chart. Show how and where the COLREG Demarcation lines are found and how they are identified.

Slide 7: Vessel Definitions

Instructor:
(click to show bullets)
Ask the class to tell the differences of the three types on the chart.

Student:

Answers should include:

- Sailing vessel – propelled by wind (if power is used becomes power driven)
- Propelled by machinery – propelled by engine
- Seaplane – aircraft designed to maneuver on water.

Slide 8: Vessel Definitions

Instructor:
(click to show bullets)
Explain:

- Underway – not at anchor, not made fast to shore or pier, not aground
- Making Way – being propelled through the water
- Adrift – not being propelled through the water, not at anchor, not made fast to shore, not aground.
- Drifting – underway but not making way

Student:

Slide 9: Vessel Definitions

Instructor:
.(click to show bullets)
Discuss Bullets

Ask the students to give an example of each.

Student:

Slide 10: The General Responsibility Rule

Instructor:
(click to show bullets)

Explain that you must follow the rules but use good seamanship to depart from the rules to avoid immediate danger.

Student:

Slide 11: Assessing Legal Liability

Instructor:
(click to show bullets)

Ask what your responsibility is when piloting your vessel.

Student:

Answers should include:

- All parties usually share responsibility for accident.
- You may be partly at fault, no matter what the other skipper does.
- If under the influence you will be partially at fault regardless of the cause.

Slide 12: General Considerations

Instructor:
(click to show bullets)
Explain that:

- Vessel types and sizes may have restrictions that may negate ”your right of way”.
- Principle cause of collisions is failure to maintain a proper lookout
- Safe speed is a function of visibility, traffic, sea state, maneuverability of your vessel.
- If you have radar, you must use it.

Student:

Slide 13: Conduct in a Narrow Channel

Instructor:
(click to show bullets)
Ask students to name the rules that pertain to narrow channels.

Student:

Answers should include:

- Keep to the right
- Don’t cross in path of another vessel.
- Don’t anchor except in an emergency.
- Vessel traveling with the current has the right of way (Inland Rules only)

Slide 14: Traffic Separation Schemes

Instructor:
(click to show bullets)
Explain:

- International rules provide a system of one way lanes in congested areas and regulate traffic.
- Coast Guard maintains Vessel Travel Services in several U.S. ports.

Student:

Slide 15: Stand on or Give Way

Instructor:

(click to show bullets)

- Explain that the stand on vessel maintains course and speed.
- Give way vessel takes whatever action necessary to avoid collision.

Student:

Slide 16: Stand on or Give Way/Danger Zone

Instructor:

(click to show bullets)

Ask a student to describe the three sectors on a boat.

Bring a model boat to class

Student:

Answers should be:

- Red – 112.5 degrees from dead ahead
- Green – 112.5 degrees from dead ahead
- White – 135 degrees from stern.

Slide 17: Stand on or Give Way

Instructor:
(click to show bullets)
Who is stand on when you see the following:

- Red/green together
- White light drawing closer
- Red light

Student:

Answers:

- Red/green together – dead ahead collision imminent. Both should take action to avoid collision.
- White light drawing closer – you are coming up behind the stern light of vessel. He is stand on, you are overtaking.
- Red light – He is stand on; you must give way.

(Use a model boat with a red/green flashlight at the bow and a white flashlight at the stern. Turn out the room lights and move the boat in several directions so students can see the different lights. This will also help with understanding sectors of the boat.

Slide 18: Rules for Special Vessels

Instructor:
(click to show bullets)

Explain the example for stand on and give way vessels.

Student:

Slide 19: Rules for Special Vessels/Overtaking & Overtaken Vessels

Instructor: Student:

(click to show bullets)

Explain:

- Overtaken is stand on
- When overtaken, power boat is give way vessel to a sailing vessel.
- Seaplanes on water give way to all other vessels except when being overtaken.

Slide 20: Rules for Special Vessels/Sailing Vessels

Instructor: Student:

(click to show bullets)

Explain:

- Sailboat with wind on port side is give way
- Sailboat to windward is give way

Slide 21: Risk of Collision

Instructor: Student:

(click to show bullets)

Explain:

- Lights – both red and green mean head on situation, may see a mast head light also. If you see 2 masthead lights, this is a vessel 50 meters or more – stay away.
- Sound signals – 1 short blast of 1 second returned by 1 short blast.
- International – both turn to starboard and signal 1 short blast...other sounds 1 short blast if agrees
- Inland – needs response before action taken except in narrow channel. 1 short blast responds with 1 short blast if agrees. Then both vessels turn to starboard.

Slide 22: Risk of Collision/Crossing Situations

Instructor: Student:

(click to show bullets)

Have 2 students assist to demo the crossing situation. Each student has a model boat and simulates different crossing situations. Ask class which sound signal to use for Inland and International waters.

Slide 23: Risk of Collision/Overtaking Situations

- Instructor: Student:

(click to show bullets)
Explain:

- Inland waters – I intend to pass on my port = 1 short blast; response 1 short blast.
  I intend to pass on my starboard side = 2 short blasts; response with 2 short blasts. If you hear 5 short blasts (danger signal) do not pass.
- International waters – 1 short blast = altering course to starboard...2 short blasts = altering course to port.
- Narrow channel – International 2 prolonged and 1 short = I intend to pass on my port side. If other agrees returns with 1 prolonged, 1 short, 1 prolonged, 1 short. Danger = 5 short – do not pass.
  I intend to pass on my starboard side = 2 prolonged, 2 short.
  Other vessel agrees = 1 prolonged, 1 short, 1 prolonged, 1 short

Slide 24: Risk of Collision/Bend Signals

Instructor:
(click to show bullets)
Who can tell us what signals are used when nearing a bend when your view may be restricted.

Student:

Answers should include:

- Operate with alertness and caution
- Sound one prolonged blast
- Approaching vessel answers with same.

Slide 25: Restricted Visibility

Instructor:

(click to show bullets)

What should a boater do when there is restricted visibility?

Student:

Answers should include:

- Go slowly
- No one has right of way
- Use sound signals
- Post outlooks
- Use radar if available to target objects

Slide 26: Restricted Visibility/Sound Signals Underway

Instructor:

Student:

(click to show bullets)

Discuss:

- Underway – 1 prolonged blast every 2 minutes
- Adrift – 2 prolonged blasts every 2 minutes with 2 second intervals between blasts.
- Sailing vessels and some less common circumstances - vessels not under command; restricted in ability to maneuver, towing and pushing vessels and fishing vessels use 1 prolonged blast every 2 minutes.

Slide 27: Restricted Visibility/Sound Signals not Underway

Instructor:

Student:

(click to show bullets)

Discuss:

- Anchor: 12 meters or greater – ring bell rapidly for 5 seconds every 1 minute.
  Less than 12 meters – make sound every 2 minutes.
  100 meters or more – bell in forepart followed by gong in aft part every one minute.
  May also sound one short, one prolonged and 1 short whistle.
- Aground: Same as at anchor with 3 distinct strokes of bell immediately before and after rapid ringing of bell.
- Special anchorage: vessels less than 20 meters do not sound signals.

Slides 28: Vessel Lights and Shapes

Instructor:
(click to show bullets)
Ask what information these provide.

Student:

Answers should include:

- Vessel size
- Position of boat in perspective of your boat
- Condition of boat
- Special boat activity
- Day shapes are black
- Shapes tell special conditions or activities
- Can be balls, cones, diamonds or cylinders.

Slide 29: Vessel Lights and Shapes/Sailing Vessels Underway

Instructor:
(click to show bullets)
Discuss characteristics

Student:

- Separate – must show sidelights and stern light but no mast head light
- Combined – combine red and green on bow with stern light and no mast head light.
- Alternative – less than 20 meters one device at or near mast head when not under power.
- Sail under power – red/green sidelights, mast head light and stern light
- Optional – additional red over green light on mast head with red/green sidelights and stern light.
- Less than 7 meters and row boat – have white flashlight or lantern.

Slide 30: Vessel Lights and Shapes/Power Driven Underway

Instructor: Student:

(click to show bullets)

Discuss characteristics

- Less than 20 meters – sidelights (separate or combined), mast head light, stern light
- 12 meters or more – mast head light should be at least 2.5 meters above gunwale.
- 50 meters or more – second mast head light abaft and above first one.

Slide 31: Vessel Lights and Shapes/Special Lights and Shapes

Instructor: Student:

(click to show bullets)

Discuss chart:

- Fishing: dragging nets – 2 all-round lights in vertical line – upper green, lower white. Day 2 cones in vertical line with apexes touching. Not trawling - 2 all-round lights in vertical line, upper red, lower white.
- Constrained by draft – 3 red all-round lights vertically stacked. Day – black cylinder.
- Towing astern – Power driven – 2 mast head lights in vertical line and yellow towing light above white stern light. Over 200 meters – 3 vertical mast head lights and diamond shape in day.
- Special vessels – Law enforcement – blue flashing light. Public safety activities – red and yellow flashing light.

Slide 32: Vessel Lights and Shapes/Vessels at Anchor

Instructor:
(click to show bullets)
Ask what lights a vessel at anchor has and what day shapes are displayed?

Student:

Answers should include:

- Less than 50 meters long – all-round white light in forepart. Day shape – ball 50 meters or longer – an additional all-round white light near its stern lower than the forward light.
- All may show deck lights. 100 meters or more must show deck lights.

Slide 33: Vessel Lights and Shapes/Diving Operations

Instructor:
(click to show bullets)
What lights does a vessel engaged in diving ops show?

Student:

Answers should include:

- Same as vessel restricted in ability to maneuver. Alternative – 3 all-round lights in vertical line. Top and bottom are red and middle on is white. Day – alpha flag.

Slide 34: Distress Signals

Instructor:
(click to show bullets)
Ask class to name some distress signals.

Student:

Answers should include:

- Gun fires, continuous sounding of fog horn, red star shells.
- Morse Code signal for SOS, Mayday radio trans., Code flags N and C.
- Black square and ball on orange background, flames on vessel, rocket parachute flare.
- Smoke signal, raising of arms outstretched, radio telephone alarm, EPIRB signal.

Slide 35: Homeland Security Measures

Instructor:
(click to show bullets)
Discuss role of boater

Stress to keep a safe distance
Report any suspicious activity.

Student:

Slide 36: Drawbridges

Instructor:
(click to show bullets)
Discuss:
Time schedules, heights
Sound, visual, radiotelephone

Student:

Slide 37: Penalties

Instructor:
(click to show bullets)
Discuss the penalties and fines.

Student: