

## KNOWLEDGE:

### THE BOAT

1. Describe different types of boats including power-driven, jet-propelled, sailing, and human-propelled. Discuss characteristics and limitations of each boat type, including hull shape, displacement type, and boat's purpose.
2. Define and demonstrate knowledge of common nautical terms used across all types of boating, such as vessel, port, starboard, bow, stern, stand-on, and give-way.
3. Define and demonstrate knowledge of directions on and around the boat and in the nautical environment, including terms like fore, aft, ahead, astern, and abeam.
4. Describe how propulsion works on inboard, outboard, stern drive, and water-jet driven boats. Discuss characteristics and limitations of propulsion types.
5. Describe parts of propulsion systems, common and unique, to different types of propulsion.
6. Describe hull shapes commonly found on modern power boats, such as planing, deep v-hull, and flat bottom. Discuss characteristics and limitations of each hull shape.
7. Describe applicable laws and regulations related to titling, registering, and/or documentation of a recreational powerboat.
8. Describe how to find and follow recommended horsepower ratings and why compliance is important.
9. Describe proper procedures and safety concerns, including ventilation, when fueling a powerboat (gasoline and diesel).

### EQUIPMENT

10. List USCG required equipment on a recreational powerboat of various lengths.
11. List state-specific equipment requirements where applicable.
12. Discuss additional American Boating recommended equipment, its use and practicality.
13. Discuss essential and additional personal equipment for both safety and utility.

## KNOWLEDGE (CONTINUED):

### BOAT OPERATOR (SKIPPER) AND CREW

14. Describe responsibilities of operator, crew, and passengers.
15. Describe procedures to become familiar with a boat's current condition and common points of failure that may interfere with its seaworthiness.
16. Explain the contents of pre-departure checklists for the boat, yourself (operator), and your crew and passengers.
17. Describe the purpose and content of a float plan, to whom it should be submitted, and when and how it should be canceled.
18. Describe how to locate weather information, and how to predict and identify and plan for weather conditions that could be dangerous, including strong winds, storms, lightning, hurricanes, and fog. Also describe various water conditions, including high water, sand bars, currents, large waves, tides, and their importance in trip planning.
19. Describe how to obtain information about local hazards and local knowledge that may affect the safe operation of a recreational boat, including the use of charts, whether or paper.
20. Describe characteristics of a small powerboat that might make it unstable during boarding, and how to board safely.
21. Determine a boat's capacity by locating and determining gross load capacity; describe how to calculate a boat's capacity; and describe proper gear stowage and its effect on stability and safety.
22. Describe common elements of a powerboat that affect safety, and basic maintenance procedures.

### LEAVING THE DOCK OR MOORING

23. Describe engine pre-start and starting procedures for different types of powerboats, including the need for engine compartment ventilation. Also describe an engine/propulsion cut-off device and how to use it.
24. Describe and name lines used to secure a small powerboat to a dock or mooring.
25. Describe crew assignments, ways they can assist, and placement of crew and passengers.
26. Describe procedures for releasing lines, including the effects of wind and current and the proper sequence to account for wind and sea conditions.

## KNOWLEDGE (CONTINUED):

### OPERATING THE BOAT

27. Describe how throttle and shift affect a small powerboat's speed, direction, and performance. Also compare tiller and wheel steering configurations.
28. Describe a boat's pivot point and how it affects turning and safety.
29. Describe the effect planing has on the boat, its speed, and its maneuverability.
30. Describe how, when, and why water depths may vary, and describe how to determine water depths and how to safely operate in waters of varying depths.
31. Discuss various sources of water surface disturbances and how they might affect a small powerboat's passage through a body of water.
32. Describe types and characteristics of ATONS that operators of small powerboats are most likely to encounter. Also describe how this information will affect the safe course, speed, and operation of a small powerboat.
33. Describe typical navigation rule situations from the Navigation Rules and Regulations (International and Inland Rules of the Road), and the operator's legal obligations in Rules 2, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, and 19.
34. Describe required lights and sound signals for recreational boats.
35. Describe visual distress signals for recreational boaters, including different types and the required visual distress signals on recreational powerboats.
36. Describe responsibilities, impacts, and hazards created by boat wakes.
37. Describe carbon monoxide dangers, sources, symptoms, and avoidance practices.
38. Describe the dangers posed by powerboat propellers and procedures for avoiding contact with people in the water.
39. Describe dangers posed by operating a vessel under the influence of alcohol and/or drugs and potential penalties for violators.
40. Describe flags commonly used to alert boaters of divers in the water. Also describe how to safely operate a vessel in the vicinity of divers.
41. Describe various methods of courteous interactions with people onshore, operators of other vessels, and the importance of maintaining polite and safe behavior on the water. Also describe when and how a boater must, according to the law, provide assistance to another boat.
42. Describe different types of anchors used for small powerboats and the appropriate bottom characteristics for each anchor. Also describe a method of anchoring that will maximize holding power, including calculating anchor rode length.

## KNOWLEDGE (CONTINUED):

### SECURING THE BOAT

43. Describe how to safely bring a small powerboat to a dock or mooring.
44. Describe how to secure a small powerboat to a dock or mooring. Name the proper lines and their locations.
45. Describe how to safely transfer people, pets, and gear from a small powerboat to a dock, or dinghy and then to a dock.
46. Describe procedures for properly stowing gear on a small powerboat. Also use a post-voyage checklist to prepare to leave a powerboat for an extended time.

### EMERGENCIES

47. Describe how to keep people safely inside the vessel to prevent accidental man overboard (MOB) situations, and also how to safely return to a person in the water and bring them back onto the boat.
48. Describe how to prevent, identify, and treat excess exposure to heat and to cold.
49. Describe and discuss common boating injuries and how to prevent and treat them.
50. Describe common sources of fire onboard a small powerboat, how to minimize the potential for fire, and how to extinguish a fire.
51. Identify potential sources of leaks on a small powerboat, how to prevent and repair leaks, and how to remove excess water from a boat.
52. Describe procedures for towing your vessel by another boat and using your boat to tow another vessel. Also describe the risk involved in potentially damaging either the towing boat or the towed boat.
53. Describe proper methods of communication with other vessels and emergency hailing over the VHF radio and by other means.
54. Describe how a boater should interact with law enforcement to ensure the experience produces the best possible outcome.
55. Describe when, how, and to whom a boater should report an accident.

## KNOWLEDGE (CONTINUED):

### ADDITIONAL BOATING CONSIDERATIONS

56. Describe how to keep people safely inside the vessel to prevent accidental man overboard (MOB) situations, and also how to safely return to a person in the water and bring them back onto the boat.
57. Describe risks unique to hunters and anglers while boating.
58. Describe how to be aware and comply with additional laws that may apply to your boat, your specific water activity, and in a particular location.

## SKILLS:

### THE BOAT

- 59. Use nautical terms while communicating, such as vessel, port, starboard, bow, stern, stand-on, and give-way.
- 60. Locate registration documents onboard, and ensure they are legal and up-to-date.
- 61. Locate maximum horsepower information onboard.
- 62. Determine whether the boat requires gasoline or diesel fuel, identify the fuel filler and its vent(s), and perform or simulate proper fueling procedures.

### EQUIPMENT

- 63. Locate and inspect all USCG required equipment onboard, ensuring compliance of minimum required equipment, proper sizes and types of life jackets for everyone onboard, and practice and demonstrate how life jackets are worn.
- 64. Locate and inspect any additional, optional safety equipment.

### BOAT OPERATOR (SKIPPER) AND CREW

- 65. Explain basic boat operation and safety concerns to crew and passengers.
- 66. Inspect the boat to determine its overall condition and seaworthiness.
- 67. Perform pre-departure checklists where applicable.
- 68. Acquire marine forecast(s) from reliable source(s) of local marine weather, and assess if a trip is prudent.
- 69. Locate sources of information about local hazards, and obtain local knowledge that may affect the planned trip.

## SKILLS (CONTINUED):

### BOARDING THE BOAT

- 70. Direct and assist crew and passengers aboard the boat.
- 71. Ensure all personal gear and boat equipment is properly stowed.

### LEAVING THE DOCK OR MOORING

- 72. Follow recommended engine starting procedure, ensuring cooling water is exiting the engine if an exit point is visible above the waterline.
- 73. Cast off, maneuver safely away from dock or mooring, and remove and stow dock/mooring lines and fenders.

### OPERATING THE BOAT

- 74. Test the throttle and shifter and steering controls at various speeds to start, stop, and turn the boat, meanwhile assessing adequate water depth and clearance in all directions. Observe all navigation rules and ATONS.
- 75. Perform various open water maneuvering exercises, including sharper turns at lower speeds, straight and curved lines in forward and reverse, using trim tabs and adjusting weight, and approaching floating objects from various wind directions.

### RETURNING THE BOAT HOME

- 76. Perform good docking procedures, briefing crew and passengers on safety measures and their supportive roles prior to docking, approaching at a safe speed, and with various wind conditions.
- 77. Preset dock lines and fenders well before making contact with the dock, and plan and execute a sequential procedure of attaching lines to cleats, pilings, or other secure points of attachment as appropriate.
- 78. Organize gear and personal items for removal on deck or in the cockpit, and assist one another in disembarking and passing gear to the deck or dinghy.
- 79. Work through a post-voyage checklist that has been provided or created.

## SKILLS (CONTINUED):

### EMERGENCIES

80. Place a floating object to simulate Man Overboard in the water, and maneuver away from it, returning to the object and retrieving it, observing all safety considerations.
81. Tie each knot listed within 20 seconds: figure-8, square (reef), clove hitch, round turn & 2 half hitches, cleat hitch, and bowline.