

Please send the completed test to membership@thebrcc.org

Berkeley Racing Canoe Center

Written Test for Steering and Safety Certification

April 2022 revision

name _____ key number _____

phone _____ email _____

team affiliation _____

This test is take-home and open book.

Collaboration with other BRCC members for background is allowed, but the answers must be the applicant's own work.

Most of the questions are true/false or yes/no. Mark the left column if the answer is True, Yes, Good Idea, or Required. Mark the right-hand column if the answer is False, No, Bad Idea, or Not Required. Questions left blank are assumed to be answered False, No, Bad Idea or Not Required.

For multiple choice questions there is only one correct answer.

Passing scores:

60/75 on questions 1-75 for non-steering keyholders.

135/155 on questions 1-155 for steering certification.

The following documents may be useful for completing the test:

From the BRCC website, <https://theBRCC.org>

BRCC Bylaws

BRCC Operating Rules

BRCC Procedures Manual

BRCC "Quick Guide for Guests"

From other web sources:

International and Inland Navigation Rules

<https://www.navcen.uscg.gov/?pageName=NavRulesAmalgamated>

Steering and safety manual from CDBA:

https://www.cdba.org/documents/site_operations/x_cdba_safety_manual_march2013.pdf

Steering tutorial from Dragon Boat New South Wales:

https://www.youtube.com/watch?v=5sifWYT_F2s

Dragon boat crashes:

https://www.youtube.com/watch?v=ayOL_DRqBoU

Basic BRCC Rules

Who can authorize the unscheduled use of a BRCC dragon boat?

1. Any BRCC officer.
2. Only the BRCC President, Vice President, Fleet Captain, Outreach Director or Competition Director.
3. Any BRCC Certified Steersperson.
4. Why does the City of Berkeley waive marina berthing fees for BRCC dragon boats, kayaks and outriggers?

- A) Because BRCC and the teams that BRCC hosts have a commitment to public service and community outreach.
- B) Because BRCC dragon boats often go out of their way to pick up floating plastic trash in the harbor.
- C) Because BRCC dragon boats respect the right-of-way of commercial vessels in the harbor and take “early and substantial” action to keep well clear.
- D) Because BRCC paddlers are good neighbors on M-Dock, leaving the docks clean and uncluttered, never blocking the dock gate open, and always coiling water hoses after use.
- E) Because team coaches respect the quiet areas of the marina and do not use excessively loud commands.
- F) All of the above.

Which of the following are requirements for being "Steersperson in Charge" of a BRCC dragon boat?

5. A California Vessel Operator Certificate.
6. BRCC certification as a Steersperson.
7. Completion of a US Coast Guard Auxiliary Safe Boating course.

Which of the following are necessary conditions for children under 8 years old to be allowed to come out on a BRCC boat?

8. A parent or guardian comes out on the boat with them.
9. A parent or guardian has signed the BRCC under-age waiver form.
10. The Person in Charge (Steersperson) considers it safe for them to be on the boat.
11. Are adult guests of BRCC members or other new paddlers ever allowed on a BRCC boat before signing the BRCC waiver form?
12. Can guests or new paddlers participate in more than two practices in any three-month period without becoming BRCC members?
13. Is a parent or guardian required to sign the BRCC liability waiver form if the paddler is over 14 but under 18?

14. ___ ___ Without special authorization by the BRCC Board of Directors, is it ever okay to take out a BRCC dragon boat for a practice session without a BRCC-certified steersperson in charge?
15. ___ ___ Can a non-certified BRCC member steer a dragon boat if a BRCC certified steersperson is on the boat as "Steersperson in Charge?"
16. ___ ___ Can a non-certified BRCC member steer a dragon boat if a BRCC certified steersperson is on a nearby dragon boat as "Person in Charge" of both boats?

What is required before taking a BRCC kayak or canoe *outside* the Berkeley Marina?

17. ___ ___ Approval by the BRCC Kayak and Canoe Chair or Vice President.
18. ___ ___ Successful demonstration of a "wet exit" or "huli" recovery as applicable to that type of boat.
19. ___ ___ Current BRCC membership.
20. ___ ___ Can a non-BRCC member ever use a one-person BRCC kayak or canoe *inside* the marina under close supervision by a BRCC member who is qualified to use that boat?

Under what conditions can a BRCC dragon boat go outside the Berkeley Marina?

21. ___ ___ The wind is under ten knots and there are no visible whitecaps.
22. ___ ___ The person in charge is certified as an "Outside Steersperson" by BRCC.
23. ___ ___ A "float plan" has been filed with the Coast Guard district office.
24. ___ ___ An escort vessel maintains a communication schedule with the dragon boat.
25. ___ ___ All paddlers are wearing PFDs.

26. ___ What is the northern limit of the BRCC outside operating area?

- A) Point Isabel
- B) Fleming Point
- C) The north-west corner of Cesar Chavez Park

27. ___ What is the southern limit of the BRCC outside operating area?

- A) The old "Hs. Lordships" restaurant building at the South Cove entrance
- B) The Emeryville Peninsula
- C) Ashby Shoal

28. ___ What is the western limit of the BRCC outside operating area?

- a) 100 meters from the shoreline
- b) 200 meters from the shoreline
- c) 500 meters from the shoreline

29. ___ ___ Are inflatable lifejackets acceptable as replacements for foam lifejackets?
30. ___ ___ Is it ever safe to wear belt pack inflatable PFD around the back of the waist?

Care of the Equipment

31. ___ ___ When should the paddles and lifejackets be rinsed with fresh water?
A) After each use.
B) After each use, but only when the sun is out.
C) Only after practice on Saturday, when the sun is out.
32. ___ ___ Do the "Sesame" brand combination locks need to be set to the correct combination to close?
33. ___ ___ Which is the correct knot for tying a dragon boat to the dock?
A) The cleat hitch
B) The clove hitch
C) The half hitch
34. ___ ___ Is it okay to leave any of the paddle or PFD lockers unlocked during practice?
35. ___ ___ Who is responsible for making sure that all the paddle and lockers are locked when a dragon boat leaves the dock?
A) The Steersperson in charge of the boat.
B) The last person on the dock.
C) The coach for that practice session.
36. ___ ___ Who is responsible for making sure that all equipment is put away and the lockers are locked at the end of a practice session?
A) The Steersperson in charge of the boat.
B) The last person on the dock.
C) The coach for that practice session.
37. ___ ___ How should the steering oar be stowed when a dragon boat is tied up?
A) Center it in the boat and turn the handle so the oar blade is horizontal.
B) Leave it on the left side so that it is on the same side as the oarlock.
C) Leave it on the right side, so it crosses the boat from the oarlock.
D) Pull it all the way forward as far as it will go, so that the blade will not fall back into the water.

General Safety Considerations

What safety equipment is required to be on board a BRCC dragon boat?

- 38. ___ ___ One properly fitting lifejacket for each person on board.
- 39. ___ ___ Whistle, tied to the steering oar or carried by the steersperson.
- 40. ___ ___ Air horn.
- 41. ___ ___ Anchor and marker buoy (outside marina only).
- 42. ___ ___ First aid kit.
- 43. ___ ___ At least two large bailing buckets.
- 44. ___ ___ Cellphone.
- 45. ___ ___ Chewable aspirin.
- 46. ___ ___ VHF radio (outside marina only).
- 47. ___ ___ Smoke Flare (outside marina only).
- 48. ___ ___ Flashlights (night only).
- 49. ___ ___ Bow and stern running lights (night only).

If a dragon boat swamps inside the Marina, which of the following is usually a good idea?

- 50. ___ ___ Have all paddlers remove their life jackets and swim to the nearest dock.
- 51. ___ ___ Instruct the paddlers to stay in the water alongside the dragon boat, holding on but without pushing down, until enough water is bailed out to support their weight.
- 52. ___ ___ Remind paddlers who might be having difficulty staying afloat that they can use several paddles, especially carbon paddles, for extra buoyancy.
- 53. ___ ___ Tell paddlers who are having trouble climbing up onto a dock to swim to the edges of the Marina and pull themselves out on the rocks.

Which of the following are necessary conditions for a paddler to take off their lifejacket during a dragon boat practice?

- 54. ___ ___ They are a good swimmer and keep a lifejacket close at hand.
- 55. ___ ___ They are over 18.
- 56. ___ ___ They are a BRCC member.
- 57. ___ ___ The boat is inside the marina during daylight.

- 58. ___ ___ If the steersperson, the coach and the drummer give conflicting commands in an emergency situation, who should the paddlers listen to?
 - A) The coach
 - B) The drummer
 - C) The steersperson
 - D) The person with the loudest voice

59. ___ ___ If a dragon boat is rounding a blind corner, and the drummer or a paddler in a forward row notices a hazard invisible to the steersperson, should that person turn around and call to "hold the boat?"

60. ___ What does a red triangular flag flying from the flagpole over the marina office mean?

- A) Small Craft warnings have been posted and strong winds are expected.
- B) Gale warnings have been posted and very strong winds are expected.
- C) The Harbormaster is serving cocktails in the marina office.

Which of the following should be included in the briefing for new paddlers and guests?

61. ___ ___ Instructions about how to float with a lifejacket on

62. ___ ___ A detailed lecture on the history of dragon boats.

63. ___ ___ A summary of paddling commands, especially "hold the boat."

Medical Emergencies

64. ___ When calling from a cellphone, what is the recommended phone number to call for emergency medical assistance in the Berkeley Marina? (Other than 911, which may go through a remote CHP switchboard instead of directly to a local emergency response dispatcher.)

- A) The Coast Guard emergency number, 800-246-7236
- B) The Berkeley Police Department emergency number, 510-981-5911
- C) The Berkeley Police Department non-emergency number, 510-981-5900
- D) Vessel Traffic Service, 415 556-2760

65. ___ If you are calling for a medical emergency, where is the best place for the dragon boat to meet the ambulance?

- A) At the BRCC home berth on M-Dock. That's where we keep our first aid kit.
- B) At the launching ramp on the north side of the harbor, just east of the boatyard. The EMTs know where that is, and the ambulance can drive right down to the boat.
- C) At the Berkeley Yacht Club guest dock. The police have their parties there so they can find it quickly.
- D) At K-Dock, behind the Harbormaster's office, so the marina staff can assist.

Marina Etiquette and Public Relations

66. ___ When is it okay to leave the gate to M-dock propped open against the gangway ramp?
- A) When other team members are expected to arrive soon
 - B) Only when there are BRCC members on the dock
 - C) Only when a public open house event is in progress
 - D) When you go to your car or to the bathroom
 - E) Never, because this can seriously damage the gate when the tide rises

67. ___ Where is a good place for the pre-practice warm-up?
- A) On the dock
 - B) On the grass
 - C) In front of the harbormaster's office

Which of the following is considered good practice for BRCC members or guests?

68. ___ ___ Forming a crowd on the dock that obstructs easy passage by boat owners.
69. ___ ___ Leaving a water hose uncoiled after use.
70. ___ ___ Inviting boat-owners and their guests to come out for a practice.
71. ___ ___ Leaving a locked combination lock set one number away from the combination.
72. ___ ___ Leaving an open combination lock set to the combination.
73. ___ ___ Leaving empty water bottles on the dock or storage float after practice.
74. ___ ___ Reporting lost keys to the marina office so the key can be deactivated.
75. ___ If you have a disagreement or dispute with any other organization or individual in the Berkeley Marina, what should you do?
- A) Argue with them until they agree with you.
 - B) Cooperate as much as possible, be polite and refer the problem to the BRCC Board.
 - C) Call the Commodore of Berkeley Yacht Club.

Stop here if you are only taking the key test

Steering Technique

(To avoid confusion when looking towards the back of the boat, the terms "port" and "starboard" are sometimes used. Port is the left side of the boat, starboard is the right side of the boat. The port and starboard sides do not change with the viewer's orientation or direction of view. For example, the steering oarlock is always on the port side of the boat, regardless of which way the steersperson is facing.)

If a dragon boat is moving forward, which of the following will cause it to turn to the left, or to port?

- 76. Moving the handle in a circular rowing motion so that the steering oar blade moves through the water from port to starboard.
- 77. Twisting the steering oar so that the top of the T handle moves toward the port side of the boat and the bottom of the T handle moves toward the starboard side of the boat, while keeping the oar on centerline.
- 78. Calling for "nose left."

If a dragon boat is not moving, which of the following will cause the boat to rotate to the left, or to port?

- 79. Moving the steering oar handle to the port side.
- 80. Moving the handle in a circular rowing motion so that the steering oar blade moves through the water from port to starboard.
- 81. Twisting the steering oar so that the top of the T handle moves toward the port side of the boat and the bottom of the T handle moves toward the starboard side of the boat, while keeping the oar on centerline.
- 82. Calling for "nose left."
- 83. Calling for paddlers on the right side to paddle forward and paddlers on the left side to back-paddle.
- 84. Calling for the forward paddlers to draw left and the aft paddlers to draw right.
- 85. Calling for all paddlers to draw left.

When doing a "draw left" maneuver from a full stop, which of the following will usually happen?

- 86. The boat will move sideways with no forward or aft motion.
- 87. The boat will move forward slightly as it moves sideways.
- 88. The boat will move backwards slightly as it moves sideways.
- 89. The boat will lean to the left unless the paddlers on the right side lean out.

Which techniques could be used to turn the dragon boat 180 degrees when it is not moving forward or backward?

90. ___ ___ "Tilling" or rowing the stern around in one direction or the other
91. ___ ___ Positioning the handle end of the steering oar to the left or right
92. ___ ___ Twisting the steering oar about its long axis, while keeping the oar on centerline
93. ___ ___ Have one side paddle forward and the other side backpaddle

If the boat is moving backwards, and the steering oar is twisted so that the top of the T handle moves toward the port side of the boat and the bottom of the T handle moves toward the starboard side of the boat, which way will the boat turn?

94. ___ ___ The bow will move to starboard, rotating the boat clockwise.
95. ___ ___ The bow will move to port, rotating the boat counter-clockwise.

If a dragon boat is moving slowly in a strong crosswind, which of the following will usually happen?

96. ___ ___ The boat will tend to turn into the source of the wind.
97. ___ ___ The boat will tend to turn away from the source of the wind.
98. ___ ___ The boat will tend to ride at right angles to the wind and be hard to turn in either direction.
99. ___ ___ The boat will be blown sideways.
100. ___ ___ What is the most likely way to damage the steering oar oarlock?

- A) Pushing too hard on the oar handle.
B) Steering the boat through a very sharp turn when moving at race speed.
C) Losing control of the oar when the boat is moving backwards.
D) Excessive twist on the oar blade.

Rules of the Road

101. ___ ___ Is a dragon boat with no forward speed considered to be "under way" as defined by the Inland Navigation Rules?
102. ___ ___ If another boat is approaching a dragon boat with possible risk of collision, and the other boat does not see the dragon boat, does the dragon boat have an obligation to keep clear?
103. ___ ___ When altering course to avoid another boat:
A) The Inland Navigation Rules require that the course change be "early and substantial."
B) The Inland Navigation Rules require that the course change be "just sufficient to prevent a collision."
C) The Inland Navigation Rules state that the vessel with "right of way" has an

obligation to “maintain course and speed as long as possible.”
D) The Inland Navigation Rules do not apply to dragon boats.

Under the U.S. Inland Navigation Rules, which kind of boat is the "right-of-way" or "stand-on" boat with respect to the other when the two are approaching with risk of collision? Assume neither boat is overtaking the other, unless specified, and assume that sailboats are under sail with no engine power.

104. ___ A) Powerboats have right-of-way over sailboats
B) Sailboats have right-of-way over powerboats
C) Neither has right of way over the other.
105. ___ A) Large commercial vessels in a channel have right-of-way over dragon boats.
B) Dragon boats have right-of-way over large commercial vessels in a channel.
C) Neither has right-of-way over the other.
106. ___ A) Dragon boats have right-of-way over sailboats.
B) Sailboats have right-of-way over dragon boats.
C) Neither has right-of-way over the other.
107. ___ A) Dragon boats have right-of-way over powerboats.
B) Powerboats have right-of-way over dragon boats.
C) Neither has right-of-way over the other.
108. ___ A) A Sailboat overtaking a powerboat has right-of-way over the powerboat.
B) A powerboat being overtaken by a sailboat has right-of-way over the sailboat.
C) Neither has right-of-way over the other.
109. ___ A) A dragon boat overtaking a powerboat has right-of-way over the powerboat.
B) A powerboat being overtaken by a dragon boat has right-of-way over the dragon boat.
C) Neither has right-of-way over the other.
110. ___ A) A dragon boat overtaking a sailboat has right-of-way over the sailboat.
B) A sailboat being overtaken by a dragon boat has right-of-way over the dragon boat.
C) Neither has right-of-way over the other.
111. ___ A) A Dragon boat has right-of-way over a kayak.
B) A Kayak has right-of-way over a dragon boat.
C) Neither has right-of-way over the other.

112. ___ A) A Dragon boat has right-of-way over a swimmer.
 B) A swimmer has right-of-way over a dragon boat.
 C) Swimmers are not mentioned in the Inland Navigaton Rules, but dragon boats should avoid running over swimmers.
113. ___ How can you determine whether another boat is approaching with risk of collision?
- A) The distance to the other boat is decreasing.
 B) Your viewing angle to the other boat, relative to the centerline of your dragon boat, is not changing.
 C) The compass bearing to the other boat, as determined by a distant background range, is not changing.
 D) The part of the other boat that you can see appears to be at the same relative angle to your sight line.
114. ___ What should you do if a large powerboat is approaching your dragon boat with risk of collision, and you are not sure if they see you?
- A) "Hold the boat" to stop immediately.
 B) Always turn away from the approaching boat.
 C) Always turn towards the approaching boat to pass astern.
 D) Take whatever action will result in a rapid change of the compass bearing from your dragon boat to the approaching boat.

Safe Navigation in the Harbor

Dragon boats practicing in the Berkeley Marina should:

115. ___ ___ stay as far to the right side of the channel as possible.
116. ___ ___ Stay away from the blind corners at the edges of the channel but favor the right side.
117. ___ ___ Make wide turns around blind corners.
118. ___ ___ Observe the "red right returning" rule.

When entering the main fairway from a narrow side channel:

119. ___ ___ Check very carefully for cross traffic that may be hidden from view.
120. ___ ___ Always come to a full stop before entering the main channel.
121. ___ ___ Respect a call to "hold the boat" from the stroke paddlers because they may see cross-traffic coming around a blind corner before the steersperson.

Why is it often hazardous to steer a dragon boat beyond the ends of the rock breakwater?

122. ___ ___ The waves might be too high for safe operation beyond the protection of the breakwater, and this can be difficult to determine from inside.
123. ___ ___ There is danger of collision with a fast powerboat coming around the blind corner at the south or north ends of the breakwater, made worse because many powerboats do not reduce speed until they reach the speed limit signs at the inner harbor entrance.
124. ___ ___ There are strong currents outside the breakwater that can sometimes make it difficult to return to the harbor.

Which of the following is a good strategy when there is heavy boat traffic in the marina?

125. ___ ___ Use the north-south axis of the marina to avoid the main channel.
126. ___ ___ Stay to the extreme far right of the main channel and avoid the areas near the hotel and harbormaster's office.
127. ___ ___ Practice outside the marina if weather conditions permit and a certified outside steersperson is on board as Steersperson in Charge.
128. ___ ___ Stay close to the detached rock breakwater, on the downwind side.

Which of the following is a likely cause of a collision in the Berkeley Marina?

129. ___ ___ Rounding a blind corner.
130. ___ ___ Losing control and swerving into an oncoming boat.
131. ___ ___ Being blown sideways into a berthed boat due to a strong crosswind.
132. ___ ___ Being hit by a sailboat that has poor forward visibility because of a low-cut sail.
133. ___ ___ Loss of steering control by a speeding powerboat.

Which of the following is good practice for avoiding collisions?

134. ___ ___ Stay to the extreme far right of the fairway.
135. ___ ___ Make early and exaggerated course changes to avoid other boats, so they can see and understand your intentions to keep clear.
136. ___ ___ Never operate in fog.
137. ___ ___ Never allow an inexperienced steersperson to practice steering inside the marina.

138. ___ What is the speed limit inside the harbor?

- A) 5 knots
B) 5 MPH
C) "no wake" speed

139. ___ Which of these boat types is usually moving the fastest when inside the marina?

- A) Sailboat under power
- B) Sailboat under sail
- C) Kayak
- D) Dragon boat

140. ___ If you are in charge of a BRCC boat that hits a berthed boat and causes damage or leaves a visible mark, what should you do?

- A) Report the incident to the Marina office with full details.
- B) Report the incident to the Marina office and to a BRCC Board member.
- C) Report the incident to BRCC's insurance carrier.
- D) Call the BRCC president after midnight.

Sound Signals

141. ___ If a large ferry is approaching a dragon boat head-on, and the ferry signals with two short horn or whistle blasts, what does it mean?

- A) It intends to pass to the left or "starboard-to-starboard" (like cars in England)
- B) It intends to pass to the right or "port-to-port" (like cars in the U.S.)
- C) it intends to increase speed.
- D) it intends to stop.

142. ___ If you agree with what the ferry's signal indicates they intend to do, what should you do?

- A) Answer with one long whistle signal.
- B) Answer with two short whistle signals.
- C) Answer with five short whistle signals.

143. ___ If you do not agree with what the ferry's signal indicates that they intend to do, what should you do?

- A) Answer with one long whistle signal.
- B) Answer with two short whistle signals.
- C) Answer with five short whistle signals.

144. ___ What is the sound signal for "danger!"

- A) 1 long whistle blast
- B) 2 short whistle blasts
- C) 2 long, 1 short, 1 long whistle blasts.
- D) 3 whistle blasts.
- E) 5 whistle blasts.

Navigation Lights

145. ___ ___ Should the red running light be visible from the starboard side?

146. ___ ___ Should the red running light be visible from the stern?

147. ___ ___ Should both red and green running lights be visible from directly ahead of the dragon boat?

148. ___ ___ On a sailboat under sail, should the white light be visible from all directions?

149. ___ What should you do if a large powerboat is approaching your dragon boat at night with risk of collision, and you are not sure if they see your running lights?

- A) Shine a powerful flashlight directly at the approaching boat.
- B) Shine a powerful flashlight on your dragon boat, and shine the light directly at the approaching boat.
- C) Shine a powerful flashlight on your dragon boat, and if necessary sweep the flashlight beam quickly across the approaching boat so as to minimize the effect of your flashlight on their night vision. Only shine the light directly at the approaching boat as a last resort.
- D) Activate the emergency flare in the safety box.

150. ___ What should you do if you cannot find a properly functioning bow light and a properly functioning stern light for the dragon boat in the locker?

- A) It is okay to operate at night with only a bow light or a stern light.
- B) It is okay to operate at night with one of the lights out as long as you carry a powerful flashlight and display it "in sufficient time to prevent a collision" as required by the COLREGS.
- C) You cannot operate a dragon boat after sunset unless both lights are working properly. Both lights are required in addition to a flashlight. You must fix the lights or cancel the practice.
- E) It is okay to operate at night with one light out as long as you have a powerful flashlight and several of the paddlers are wearing headlamps.

Dealing with Sailboats

151. ___ What does a typical sailboat, when working its way upwind, do when it “comes about” or “tacks?”
- A) Turns 45 degrees.
 - B) Turns 90 degrees.
 - C) Turns 180 degrees.
152. ___ ___ A sailboat in the Berkeley Marina is most likely to have restricted forward visibility when sailing with a low-cut or “deck-sweeping” jib.
153. ___ ___ A sailboat skipper is most likely to not be paying attention to where their boat is going when the mainsail is being raised or lowered.
154. ___ ___ Sailboats can stop quickly but can’t make sharp turns, while dragon boats can make sharp turns but can’t stop easily.
155. ___ What is the best VHF channel to use for an emergency call to the Coast Guard?

I certify that I have reviewed the recommended background material, that I understand the questions in this test, and that the answers provided here are my own work.

signature _____ date ___ / ___ / _____