Cruising Skipper Skills Requirements

Candidates who wish to become cruising skippers must demonstrate skills in the following areas:

1. Sailing a large keel boat both in light and heavy air
   a. Must be able to sail a given point of sail or compass course without sails luffing or boat veering off course more than 10 degrees
   b. Tack, jibe and heave-to safely and efficiently
   c. Put up and take down the sails properly

2. Operate a large keel boat under power
   a. You must have a safe boater license or a captain's license. This is required regardless of the age of the candidate
   b. Change gears correctly after throttling down and winding down in neutral
   c. Perform a pivot turn in tight quarters
   d. Understand the prop walk effect in reverse and use it to advantage if possible

3. Docking the boat and departure planning
   a. Analyze the forces acting on the boat and determine the best way to depart from the docks
   b. Use the boat’s momentum to your advantage
   c. Understand the prop walk effect in reverse and use it to advantage if possible
   d. Employ the spring lines correctly to control the boat in adverse wind conditions
   e. Assign crew to handle the dock lines
   f. Bring the boat alongside the dock (within 2 ft) to a complete stop without any part of the hull touching the dock (fenders may touch)
   g. If getting into the slip, the boat must be stopped no more than 3/4 of the way in. Spring line should not be necessary to stop the boat
   h. Select the correct dock lines to use when operating with minimum crew

4. Anchoring the boat and weighing anchor
   a. Select a suitable area to drop anchor
   b. Check the anchor and rode
   c. Assign crew to handle the tasks
   d. Operate the vessel under power to approach the anchoring location and drop anchor and set it, verify it's not skipping or dragging
   e. Turn on the anchor light if night time
   f. Explain how to perform anchor watch checks with transits
   g. Weigh anchor by bringing the vessel just above the anchor to make the rode vertical. Allow crew sufficient time to pull up the anchor

5. Reefing the sails
   a. Determine when to reef the sails
   b. Assign crew to tasks
   c. Reef the sails correctly
   d. Shake out the reef correctly
6. POB quick stop method under sail in 15+ mph winds
   a. Must be able to execute a quick stop POB maneuver under sail by tacking while backing the jib, and then circling back to the victim
   b. Must pick up the POB on the leeward side, with the boat stopped without getting into irons (close reach with main luffing)
   c. Must be able to describe how to physically get somebody out of the water and on board the vessel, especially if the POB is heavier than you can easily lift out
   d. Must be able explain hypothermia and how to deal with it
   e. Must be able to explain the steps if the engine is used during POB

7. On board boat systems knowledge
   a. Diesel engine operation and basic troubleshooting
      i. Describe the basic diesel principle and the differences
      ii. between gasoline engines and diesel engines
      iii. Perform checks such as oil, coolant, fuel level and belt tension
      iv. Explain the recommended engine startup and shutdown sequence
      v. Identify major subsystems of a diesel engine
      vi. Troubleshoot common no crank problems
      vii. Explain diesel fuel line air bleed procedure
   b. Electrical systems and basic troubleshooting
      i. Batteries and switches, voltage levels
      ii. Marine boat wiring and required navigation lights and visibility range
      iii. Solar panels and charging systems, alternator

8. Basic knot tying and general familiarity with lines and rigging
   a. Whipping the line ends, coiling the lines, securing the docklines properly
   b. The knots candidate must be able to tie:
   c. Bowline, also with Yosemite Finish or another way to secure it
   d. Running bowline (or rolling/tautline hitch, adjustable grip hitch)
   e. Clove hitch
   f. Cleat hitch (US method, not the RYA one)
   g. Girth hitch (similar to cow hitch)
   h. Figure of 8 or similar stopper knot (like stevedore or oysterman's stopper)
   i. Round turn and two half hitches
   j. Sheet bend (or a variation like double sheet bend, zeppelin bend)
   k. Slipped square knot.

9. Perform basic rig inspection to recognize common failures:
   a. Winches not clicking correctly
   b. Fish hooks on the wires
   c. Missing cotter pins or ring dings
   d. Frayed lines, lifelines too loose.

10. Rules of the Road knowledge
    a. You must pass a written rules of the road test
    b. You must be able to analyze on-the-water boat-on-boat situations correctly and answer questions related to the rules.
11. Commanding and instructing the crew.
   a. In all procedures involving the crew, skipper candidate must be able to give clear
      instructions and commands so that the crew can execute them safely. This skill is
      evaluated by the mentors continuously during the sessions.
   b. Brief the crew on the boat systems and provide basic orientation before departure.
   c. Must remember the name of each person on board and address them directly when
      giving commands.
   d. Be aware of crew capabilities and limitations not to put anybody in an unsafe
      situation.
   e. Exhibit a calm and confident demeanor to gain crew's trust and handle emergencies
      without making things worse.

12. DSC cruising policy and guidelines knowledge. The candidate:
   a. Must be familiar with the DSC safety policies and agree to follow them
   b. Must be familiar with the cruising program policies and guidelines
   c. Must return the boat safely and leave it in ship-shape condition
   d. Must report any discrepancies or mishaps thru the online boat check-in procedure and
      by contacting the boat manager or cruising program manager as needed.
   e. Make a proper entry in the ship's log before and after the trip.

13. Weather-related warnings and their interpretations
   a. Understand the 4 basic weather elements: Temperature, pressure, atmospheric activity
      and winds.
   b. Check weather prediction sites and other sources before and during the voyage.
   c. Correctly decide when to seek shelter, reduce sail area or postpone a trip
   d. Know the best practices if caught in a lightning storm

14. VHF radio usage and emergency signals
   a. Demonstrate proper VHF radio usage and channel selection
   b. Explain the difference between mayday, pan-pan and securitee calls
   c. Convey lat-lon information if available
   d. Be familiar with radio range limitations, line-of-sight communication etc
   e. Explain other emergency signals and when to use them
   f. Explain the obligations of a mariner in different emergency situations

15. Handling on board emergencies other than POB
   a. No functional engine docking at T-head
   b. Fire on board, extinguisher usage
   c. Medical emergencies and common situations such as sea sickness
   d. Running aground and self-rescue attempts
   e. Rope or crab pot fouling the prop
   f. AED usage and CPR (although we don't test candidates on this, they are highly
      encouraged to attend a First Aid class.)

16. Reading marine charts and basic navigation
   a. Explain chart symbols, scale and indicators
   b. Explain channel marks and buoy system
   c. Perform basic calculations based on speed/distance
   d. Explain waypoints and GPS coordinates to locate things based on lat/lon on a chart