OFFSHORE PASSAGEMAKING STANDARDS

Prerequisites: All previous Keelboat and Navigation Standards

General Description: The student is able to safely act as skipper or crew in a sailing vessel on offshore passages requiring celestial navigation.

SAILING KNOWLEDGE

A. Certified Sailor has successfully demonstrated his or her ability to:

Passage Planning

1. Plan a North Pacific (or North Atlantic) passage. Plot a Great Circle Route, including waypoints, and select the earliest opportunity in the current year for such a trip. Plot on Great Circle Plotting charts. In essay form, discuss/state the advantages, disadvantages and hazards of various routes. List references and submit copies when necessary. “Ocean Passages for the World”, Climatic Charts, Great Circle Plotting Charts, plotting instruments, etc., must be used. Prepare a passage plan for the cruise, which will qualify candidate for ASA Offshore Passage-Making certification. Include charts and other important information.

2. Plot a series of rhumb lines on a mercator chart to approximate a great circle route.

3. List the publications you would select for prudent navigation on an offshore (North Pacific) passage, to include the following:

   - Coastal Charts and Publications
   - Ocean Passages for the World
   - Sight Reduction Tables
   - Work Sheets
   - Nautical Almanac
   - Plotting Sheets
4. State the essential factors to be considered when selecting a vessel for an offshore ocean passage of at least 1,000 miles. Submit a brief essay on which U.S. production sailboat you would select for this trip. Compare features like:

- hull / hull shape
- rudder
- machinery
- fuel capacity / range
- hull construction
- keel
- water capacity
- sails
- displacement
- rig
- interior layout, etc.

5. List all items essential for minor repairs to vessel and rigging.

6. Describe various items required to prevent chafe.

7. Describe the advantages and disadvantages of three self-steering methods / devices.

8. List all basic items necessary to repair sails.

9. Plan meals for a minimum of four people on a seven-day offshore passage. Include a meal plan for four people for seven days without refrigeration.

10. Describe the proper methods of preserving/storing food and the expected storage life of all food.

11. State the factors to be considered when selecting crewmembers for an offshore passage.

12. Describe suitable clothing for the voyage.

13. State a source of obtaining advanced first aid information while on an offshore passage.

14. Identify and describe the basic treatment of potential medical problems.

15. Describe methods of preventing injury to the cook or nearby persons while cooking at sea.

16. List the items carried in a proper first aid kit for an offshore passage. Describe first aid preparations including crew training, contents of the kit(s) and reference materials.

17. Prepare and file / submit a passage plan and a brief discussion of how it would be filed, with whom and how it would be used if necessary.
Shipboard Routines

18. Describe three (3) watchkeeping systems and their application, advantages and disadvantages.

19. Describe alternate watchkeeping arrangements in the event crewmembers are incapacitated. Briefly describe and discuss your chosen watch keeping system. Also, include an alternative if none or more crewmembers become unable to assist.

20. Describe the duties of the watch and off watch.

21. Establish a routine schedule to periodically inspect and maintain the following items:
   · Bilges
   · Heads
   · Galley & supplies
   · Safety equipment
   · Sea cocks
   · Hatches
   · Fuel and water
   · Electronic equipment
   · Rigging
   · Helm
   · Machinery

22. Set up a routine schedule for vessel cleaning.

Emergency Procedures

23. Describe how to rig a trailing man overboard line with an alarm. Describe a man overboard trailing line with alarm.

24. Describe an alternative method of alerting the crew to a man overboard situation. State other emergency situations when you should limit the use of this device.

25. Describe what actions should be taken when a man overboard is not located on the first pass.

26. Describe how to organize the crew for a routine fire drill.

27. Describe possible methods of jury-rigging your vessel in the event of dismasting and what course you would then assume. Simulate a dismasting by lowering sails. Jury-rig a sail, which occupies only that area of the foretriangle below the spreaders (the portion of the rig which was salvageable and able to be secured to carry sail). Halyards run through masthead sheaves are unusable. Carry on under these conditions for at least two hours and clearly indicate the necessary adjustments in navigation.

28. Describe proper actions you would take after your vessel has been struck by lightning.

29. List essential survival items to be kept in a standby kit in the event you are forced to abandon ship offshore.

30. Describe additional items useful for your survival and rescue. Describe the contents of your abandon ship bag as well as the bag itself. Compute it’s final weight and size. Discuss where it will be located and how it is to be secured.

31. State the dangers you might encounter in a small rubber life raft at sea.
32. List safety equipment you would carry in addition to that required by the United States Coast Guard. Describe crew briefing on emergency procedures.

Rules of the Road

33. Know and apply the 1993 International Regulations for Preventing Collision at Sea (Navigation Rules) quickly and correctly in order to maintain safe navigation in any waters day and night.

34. List eight of ten international distress signals.

SAILING SKILLS

35. Acted as skipper and crew on an offshore passage of no less than 72 hours and 100 NM without touching land. While on passage of not less than 100 NM, document and submit the following information. All work should be done beyond the sight of land.

Chart and keep current with DR and coastal and celestial fixes not more than 12 hours apart. Include sun sights, as well as other visible bodies used for fixes and running fixes.

Log sheets should be kept which document each candidate’s participation in activities necessary to shipboard life. Included among these should be navigation (coastal and celestial) helming, maintenance, galley work, etc.

A. Certified Sailor has successfully demonstrated his or her ability to:

36. Obtain a celestial fix using a sun-run-sun or three (3) celestial bodies.


Perform the following drills:

– Steer vessel without the aid of a rudder for a period of 2 hours performing course alterations greater than 20 degrees on at least two occasions. Maintain the new course for a minimum of 30 minutes.

– Cast one or two members adrift in a dinghy. Sail away for at least 15 minutes or 1/8 NM, whichever is greater. Return and retrieve victim(s). (This exercise will be used as extra credit in the event that a passing grade is questionable. It should only be performed if the conditions permit safe execution.)