

OFFSHORE STANDARD

An offshore passage is defined as a voyage exceeding 100 miles from the nearest land and is navigated by celestial and electronic means without visual or electronic reference to terrestrial objects.

Objective

To be able to safely act as skipper and crew in a sailing cruiser on an offshore passage requiring celestial navigation.

Prerequisites

Advanced Cruising and Celestial Navigation Standards.

VHF with DSC radio certificate (Radio Operator's Restricted Certificate - Maritime Voluntary); Red Cross or St. John Ambulance Standard First Aid Certificate; and a nationally recognized certificate in CPR - level "A" or higher. Completing the Advanced Navigation Standard is highly recommended.

Ashore Knowledge

Section I: Passage Planning

The candidate must be able to:

1. Plan a passage across the North Atlantic or Pacific and to be able to state the advantages, disadvantages and hazards of various routes. *Ocean Passages for the World, World Cruising Routes, Climatic Charts, Great Circle Plotting Charts, plotting instruments, etc.*, may be used;
2. Plot a series of rhumb lines on a mercator chart to approximate a great circle route;
3. List the publications required for prudent navigation on an offshore passage to include the following:
 - a) Coastal charts and publications
 - b) *Nautical Almanac*
 - c) Sight reduction tables
 - d) Plotting sheets
 - e) Work sheets
 - f) Pilot charts
 - g) *Ocean Passages for the World* or *World Cruising Routes*.

Section II: Voyage Preparation

The candidate must be able to:

4. State the essential factors to be considered when selecting the vessel:
 - a) Displacement
 - b) Hull shape
 - c) Keel
 - d) Rudder
 - e) Rig
 - f) Sails
 - g) Interior layout
 - h) Fuel capacity
 - i) Water capacity
 - j) Engine / machinery;
5. List items to be carried to effect minor repairs to vessel and rigging;
6. Describe items required to prevent chafing;
7. Describe three methods of self steering, their advantages and disadvantages;
8. List items necessary to repair sails;
9. Plan meals for a minimum of four people for a seven day passage;
10. Describe:
 - a) Proper methods of preserving and storing food
 - b) The expected storage life of all food;
11. State the factors to be considered when selecting the crew:
 - a) Health
 - b) Compatibility
 - c) Experience/competence
 - d) Attitude
 - e) Capability;
12. Describe suitable clothing for the voyage;
13. State source of obtaining advanced first aid information;
14. Identify and describe the basic treatment of potential medical problems;
15. List the items to be carried in the first aid kit;
16. Describe methods of preventing injury to the cook or nearby persons while cooking at sea;
17. Prepare and file a passage plan.

Section III: Ship Board Routines

The candidate must be able to:

18. Describe 3 watch keeping systems and their application, advantages and disadvantages;
19. Describe alternate watch keeping arrangements in the event that crew is incapacitated;
20. Describe the duties of the crew on watch and off watch;
21. Establish a routine schedule to periodically inspect and maintain the following items:
 - a) Bilges
 - b) Sea cocks
 - c) Heads
 - d) Hatches
 - e) Galley and supplies
 - f) Rigging
 - g) Helm
 - h) Electronic Equipment
 - i) Safety Equipment
 - j) Fuel and Water
 - k) Engine / Machinery;
22. Set up a routine schedule for the cleaning of the vessel.

Section IV: Emergency Procedures

The candidate must be able to:

23. Describe how to rig a trailing crew overboard line with an alarm;
24. Describe an alternative method of alerting the crew to a crew overboard situation. State what other emergency situation to which you would limit the use of this device;
25. Describe what action should be taken on a crew overboard situation when the location of the crew has not been determined on the first pass;
26. Describe methods of steering a vessel without the use of the rudder;
27. Describe the various methods of stopping and controlling serious leaks;
28. Describe how to organize the crew in establishing a fire drill routine;
29. In the event of dismasting describe possible methods of jury rigging your vessel and what course you would then assume;
30. Describe what action you would take after your vessel had been struck by lightning;
31. List the items to be kept in a standby kit most essential for your survival.

Section V: Rules of the Road

The candidate must be able to:

32. Operate a vessel in a safe and responsible manner, applying rules 1-37, 40 and 45 of the *Collision Regulations* competently and correctly in order to maintain safe, responsible navigation in any waters by day and night;
33. Describe the shapes and characteristics of the Canadian Buoyage System.

Section VI: Weather

The candidate must be able to:

34. Describe the major cloud types, the weather and future weather associated with each;
35. State the sources of offshore weather information in one region;
36. Interpret the weather forecast and make up a rough synoptic chart for the area to be sailed;
37. Describe the formation, features, and accompanying weather of a depression in both the northern and southern hemisphere;
38. Describe the major wind belts of the world;
39. Discuss the warning signs, features, localities and seasons of the various tropical storms;
40. Describe the best course of action if a vessel is unavoidably in the path of a tropical storm.

Afloat Skills

The candidate must be able to:

1. Act as skipper and responsible crew on a passage of no less than 5 days, covering at least 500 nautical miles and venturing at least 100 nautical miles from the nearest land;
2. Obtain, reduce and plot a celestial fix using a sun-run-sun method;
3. Obtain, reduce and plot a night time celestial fix using 3 bodies;
4. Make a celestial compass deviation check;
5. Obtain the available weather information by radio while underway and interpret the forecast;



6. Coordinate the recovery of a simulated crew overboard, sailing a minimum of 5 minutes on a steady course after falling overboard;
7. Demonstrate the various possible techniques to be used in heavy weather situations;
8. Maintain a proper and legal ship's log;
9. Demonstrate ability to sail at the advanced level of skill;
10. Demonstrate ability to assume total competent command of all operations of the vessel and its crew in an offshore environment.