ASA 114: Cruising Catamaran

This course will teach you to sail a 30 to 50 foot multihull boat by day in coastal waters as both skipper and crew.

Pre-study is vital to the success of your course. There will be two tests for this course, one performance and one written. Upon successful completion of this course, you will receive your American Sailing Association, Cruising Catamaran certification.

The textbook used for this course is “Multihull Fundamentals” by Rick White. It is available directly from the American Sailing Association, Amazon.com or your local book store. Be sure to compare prices listed on the ASA website before purchasing from another source.

The Annapolis Book of Seamanship is an excellent book for your sailing library and can help you in your preparation for this course.

Please study the material outlined below so that you will be prepared at the time of your course and able to concentrate on the principles taught by the instructor.

Listed below are the standards, set by the American Sailing Association, which you will have mastered upon successful completion of the course.

Prerequisites: Basic Keelboat (101) and Basic Coastal Cruising (103). The Bareboat Charter Standard (104) is also a prerequisite and can be attained either by itself prior to BBC Multihull (114). In either case, all material in both standards (104 & 114) must be taught and tested before 114 can be awarded.

General Description: An advanced cruising standard for individuals with cruising experience. The individual can act as skipper and crew of a 30-50 foot multihull sailboat by day in coastal waters. The standard includes those skills unique to a 30-50 foot multihull.

SAILING KNOWLEDGE

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

1. Identify and describe the following hardware/terms:

Bridgedeck	Cabin	Three point rig
Briddle-line	Catamaran	Crossarms
Float	Full wing deck	Open wing deck
Partial wing deck	Galley down	Galley up
Hull(s)	Main hull	Multihull
Safety nets	Seagull striker	Dolphin striker
Stability	Stability Curves	Trimaran
Wing deck	Bridgedeck	Cabin

2. Discuss the advantages and disadvantages to operating a multihull sailboat.
3. Describe the weight carrying characteristics of 30-50 foot cruising multihulls and how weight distribution affects safety and performance.
4. Describe the differences in performance between multihullls and monohulls of about the same size.
5. Describe the accommodations of a typical 30-50 foot multihull and how comfort and safety will differ from a monohull.
6. Identify differences in ships systems between multihulls and monolhulls.
7. Describe shoal draft and its effect on planning ahead and sailing.
8. Describe the danger of capsizing, how to recognize the danger and how to prevent it.
9. Discuss the characteristics of a multihull which determine windage and the effects of windage on course and speed.
10. Discuss how multihull design affects turning radius.
11. Describe a typical center/daggerboard installation on a multihull and how they affect performance.
12. Describe options for gear stowage and proper stowing procedures.
13. Describe how and where a safety harness tether would attach to a multihull.
14. Discuss the various sail combinations and how they affect balance of a multihull.

15. Discuss the differences of multihull heavy weather sailing practices (advantages and disadvantages) including the following:

- Lying ahull
- Sea anchors
- Heaving-to
- Running off and standing on
- Speed controls

16. Describe and discuss the methods of rafting multihulls and the limitations involved.
17. Discuss the limitations of a multihull galley and methods of working safely in the galley.
18. Discuss auxiliary power options on a multihull.
19. Discuss engine placement on a multihull and its affect on performance and comport.
20. Discuss common mechanical maintenance on a multihull.
21. Discuss common mechanical repairs on a multihull.
22. Describe and discuss what to do if one or both engines fail.
23. Describe options for carrying and towing a dinghy.
24. Describe the method of tying a multihull securely to a dock in areas of varying tidal range.

SAILING SKILLS

A certified Sailor has successfully demonstrated his or her ability to:

Boat Handling Under Power

25. Cast off and safely leave a dock with at least two different wind directions relative to the bow (i.e., wind across the stern and wind across the beam).
26. Stop the bow of the boat within four feet of a marker while maneuvering under power. Perform the exercise upwind, downwind and with the wind across the beam.
27. Maneuver the boat under power in a confined space, noting the effects of wind and current.
28. Maneuver the boat within 2 feet of, and parallel to a dock. Define and carry out a bail-out plan.
29. Turn the boat in the tightest possible circle to determine its turning radius. Twin screw boats will perform the exercise with screws turning in opposite directions and again with screws turning in the same direction.
30. Repeat item 29 turning the boat in the opposite direction and compare the differences between both turns.

31. Repeat items 29 and 30 while making stern way (going backwards).
32. Steer a straight course of at least 10 boat lengths in reverse using moderate speed.
33. If the boat used for certification is equipped with two engines, repeat items 30-31 using one engine then the other.
34. Steer a multihull using an emergency steering device.

- Moving forward on a steady bearing
- Moving backward on a steady bearing
- Moving forward on a figure 8 course

Person Overboard

35. Demonstrate a skippers actions and commands while under power from the time a member of the crew falls overboard without warning until the crew is safely recovered.
36. Describe at least two methods of getting a person out of the water and back on board a multihull.

Boat Handling Under Sail

Points of Sail

37. Function as helmsman and crew giving correct commands and proper responses while demonstrating the proper techniques of close hauled sailing, reaching (all three points), running, tacking and jibing, heading up, bearing away and luffing while noting the differences and likenesses of sailing a multihull vs. monohull.
38. Sail an ordered compass course for 5 minutes without varying more than 10 degrees from the heading.
39. Sail a figure 8 course between two buoys noting acceleration/deceleration times and momentum during turns.
40. While sailing at full power, luff sails and observe how long it takes for a multihull to come to rest.
41. Trim luffing sails noting how long it takes to accelerate to full power.

Person Overboard

42. Demonstrate a skippers actions and commands while under sail from the time a member of the crew falls overboard without warning until the crew is safely recovered.

- Use tow different return techniques including the quick-stop method

Heavy Weather

Points of Sail

43. Reduce sail by reefing and shaking out a reef while keeping the vessel under control and on course.
44. Heave-to and get underway again, noting the vessels motion at different angles to the wind.
45. Sail with mainsail only, then headsail only noting performance characteristics and limitations.

Anchoring

46. Use proper anchoring techniques to anchor using the following methods:

- Two anchors off the bow or stern (Bahamian style)
- Single bow anchor and bridle
- Single bow anchor and stern to the beach (Med style)
- Bow to permanent mooring with bridle (if available)
- Beaching with consideration of daggerboard/centerboard, rudder and hull mounted electronics. (optional)

Making fast and Snugging Down

47. Secure a boat to various dock configurations so as to provide limited movement and set out fenders correctly. Take extra precautions to secure a vessel for the night at a dock and at a mooring.