

COASTAL NAVIGATION STANDARD (105)

Prerequisites: None

GENERAL DESCRIPTION: Able to demonstrate the *navigational theory* required to safely navigate a sailing vessel in coastal or inland waters. There is no Sailing Skills part to this Standard and practical application of this Sailing Knowledge is found in the Advanced Coastal Cruising Standard.

SAILING KNOWLEDGE

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

1. Explain the chart symbols and conventions on U.S nautical charts in accordance with the terminology of chart 1.
2. Identify a source of official U.S. Coast Guard navigational publications.
3. List the publications required for prudent navigation in the local area including the following ASA minimum requirements:
 - Large scale chart of the area and Chart # 1
 - Federal Requirements for Recreational Boats.
 - U.S. Coast Guard Navigational Rules
 - State small vessel regulations
 - Local rules and regulations, if applicable
 - Local sailing directions
 - Tide and current tables, if applicable
 - List of lights, buoys and fog signals
 - Radio Aids to navigation (if using radio or RDF)
4. List the instruments required for prudent navigation in the local area including the following minimum requirements:
 - Steering compass and deviation table
 - Hand bearing compass and/or pelorus
 - Binoculars
 - Dividers
 - Protractor or parallel rule
 - Watch or clock
 - Depth sounder or leadline
 - Log/Knotmeter
 - Pencil, eraser, and notebook
5. Describe the purpose of "Notice to Mariners".

6. Use the tide and current tables to find:
 - Times and heights of tides at reference and secondary ports
 - Direction and rate of current at reference and secondary stations
7. Convert courses and bearings between true, magnetic, and compass.
8. Check compass deviation by means such as transit bearing.
9. Plot a dead reckoning position on a chart using speed, time, and course to steer.
10. Allow for the effect of current and leeway to plot the estimated position.
12. Demonstrate the use of the VHF.
13. Plot a chart position from terrestrial objects using.
 - Two or more bearings on different objects taken at one time
 - Bearings at different times (i.e. a running fix)
 - One bearing and a transit range
 - One distance (i.e. a sounding or dipping a light) and one bearing
14. Use the above techniques to chart a course of at least 20 miles and three course changes..
15. Explain the terms and characteristics used for lighted navigation aids.
16. Explain the significance of shapes, colors, and lights used in buoyage systems.