



Bluewater Sailing

Est. 1978, 25th Anniversary !!
A Division of Compass Rose, Inc.
SAFETY! FUN!! LEARN!!!™

Sailing, Power & Navigation Instruction
Yacht Management and Delivery

Our Professional Instructors Average More than 20 Years Experience On The Water
American Sailing Association & International Yachtmaster Training Certification Facility

Boat Rentals & Yacht Charters

Group / Private Lessons

CELESTIAL NAVIGATION STANDARDS

Prerequisites: None

General Description: Able to demonstrate the Celestial Navigation theory required to safely navigate a sailboat on an offshore passage. The practical application is conducted in the Offshore Passage-making Standard.

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

1. Convert longitude into time.
2. Convert standard time and zone time to GMT and vice versa.
3. Calculate the zonetime given longitude.
4. Calculate the chronometer (or watch) error given a previous error and the daily rate.
5. Apply the corrections for index error, dip of the horizon, and total correction to convert sextant altitudes of the sun, stars, planets, and moon to true altitudes.
6. Calculate the time of meridian passage of the sun and calculate the boat's latitude from the observed meridian altitude of the sun.
7. Determine the latitude at twilight by means of the Pole Star.
8. Solve the navigational triangle using a navigation table and show all appropriate work.
9. Plot celestial lines of position on a Mercator projection or on a universal plotting sheet.
10. Calculate the times (ship's and GMT) of sunrise, sunset, and twilight.
11. Determine the approximate azimuths and altitudes of the navigational stars and planets at twilight.
12. Calculate and plot the lines of position obtained from observations of several celestial bodies at twilight and thus find the boat's position.
13. Advance the LOP obtained from a sun sight to another LOP obtained from the sun at a later time and find the boat's position using a running fix (sun-run-sun).
14. Calculate the true bearing of a low altitude celestial body in order to determine the error & deviation of the compass.