Coastal Navigation Standard

ASA Standard: ASA105 Coastal Navigation
ISSA Standard: Yacht Level 2 + Level 3 (Part)

General Certification Requirements

The Coastal Navigation Certification holders will have demonstrated the art of traditional navigation techniques and the ability to integrate electronic navigation tools into the navigation plan.

Coastal Navigation Certification requires the successful completion of the following knowledge and skills, as demonstrated by passing both a practical and written examination. These requirements are expected to be performed with confidence and a high degree of accuracy.

Course formats

The course completion is a combination of practical and a written theoretical examination. The theoretical elements of the course will be conducted on shore.

Recommended Equipment

It is required that Coastal Navigation courses be conducted on a live-aboard cruising yacht equipped with log/speed, depth-sounder and GPS/Loran. On-shore classroom environment with adequate equipment inventory and publications to complete all required certification outcomes.

Knowledge

- The Chart
- Buoyage systems and Aids to Navigation
- Conversion of Relative bearings for plotting
- True and magnetic compass roses
- Geographical and luminous range of a light

Publications

- Sources of appropriate navigation publications
- Select appropriate charts from the chart catalog
- Update charts using the Local Notice to Mariners
- Use an Abbreviations reference
- Use a Coast Pilot or similar publication
- Use a Light List or similar publication
- Use Tide Tables to determine the:
    - height of tide
    - direction and strength of current

Skills

- Correct application of variation and deviation
- Use a hand bearing compass
- Use of plotting tools
- Measure distance on a chart with and without a bar scale.
- Determine the Latitude and Longitude of a position.

- Identification of physical objects using range, contour lines, spot heights and physical features
- Plot and label, neatly and accurately, the following items:
    - Dead Reckoning (DR) course
    - Position Fixes
    - A running fix
    - Danger bearing
    - Ranges/transits
    - Course corrected for leeway
    - Course to steer given current the set and drift
- The operation of electronic navigation instruments:
    - Speed/logs
    - Depth Sounders
    - Wind speed/direction
    - Loran
    - GPS
    - Radar
    - Weather Fax
    - Plotters
- Passage Planning:
    - Distance:Fuel
    - Provisioning
- Safe inshore pilotage:
    - Safe course
    - Clearing (or danger) bearings
    - Back bearings, ranges (or transits)
    - Depth Sounder
    - Transits/Ranges
- Navigational strategies for:
    - The favored tack
    - Upwind or up-current arrival
    - Anticipating leeway
    - Working the middle
    - Dawn or late afternoon arrival
- Safety precautions to be taken before entering reduced visability:
    - Buoy hopping
    - Deliberate offset
    - Anchoring Depth
    - Visibility circles
- Integration of electronic information with traditional navigation techniques.
- Understand how to interpret and integrate weather information
- Navigation log