## Changes to Coastal Navigation

Navigation Standards Split and added additional content

- Basic Coastal Navigation
  - New exams, open book
  - Prerequisite for Intermediate Cruise/Powerboat
- Intermediate Coastal Navigation
  - New exams, closed book
  - Prerequisite for Advanced Cruise
  - Common Plotting Standard
- Transition Period 2017

No Coastal Navigation (old standard) Certifications after 2017-12-31



## **Basic Coastal Navigation**

#### Removed

- In local area (and familiar waters references)
- Check compass deviation using a transit bearing
- Plot an EP allowing for current and leeway
- Plot a running fix
- Plot a position using a distance (sounding or dipping a light) and a bearing
- Determine a heading to counteract current or leeway
- Determine a current
- Passage Plan
- Transfer positions between charts

#### Added

- Navigators Role (Appraisal, Planning, Execution, and Monitoring)
- Current Atlas
- List factors affecting depth above and below chart datum
- Determine rate and direction using Tidal Diamonds or Current Atlas
- Pilotage Plan (Line of Sight)
- Recognize Day and Night appearance of Aids
- Describe Information to be included in a vessels log
- Use Sail Canada Uniform
   Navigation Symbols and Terms for plotting and labeling



## Intermediate Coastal Navigation

#### Added

- Navigators role (ColRegs related)
- Intermediate tidal heights using Tide Tables (Rule of 12ths is examined), and Current Atlas or Tidal Diamonds
- Process to build a deviation card
- Means to calibrate a depth sounder, and a knotmeter or knot log
- Explain causes of leeway and how to estimate underway
- Plot/determine EP given a DR and current/leeway

#### Added

- Departure or Arrival Plan to include night departure/arrival considerations
- Describe the difference between IALA Region A and B systems and where each applies
- Explain GPS XTE, methods to evaluate GPS position accuracy, and differences in vessel course between steering compass and GPS
- Use Sail Canada Uniform
   Navigation Symbols and Terms
   for plotting and labeling

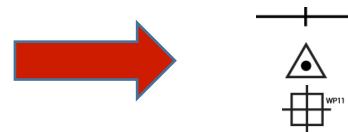


# Uniform Navigation Symbols & Terms (Common for all Navigation Standards)

#### **Old Standard**

- DR
- EP
- Waypoint

#### **Uniform Navigation Symbols**



- LOPs (Lines of Position):
  - Visual,
  - Transferred,
  - Circle of Position,
  - and TransferredCircle of Position

standardized between Coastal Navigation and Celestial Navigation

 Alternative terms TR (Track (COG)) and SOA (Speed of Advance (SMG)) introduced



### **Evaluation**

#### **Basic Coastal Navigation**

Ashore exam: Open book

- 2 ½ hours need 70% overall
- 2 sections ( A : theory & B : plotting)
  - Need 60% on each
  - Theory section 5/8 weighted,
     65% of exam
  - Plotting section is unweighted,
     35% of exam
- Afloat In Intermediate Cruising
- Course Length: Recommended ~17 hours (including exam)

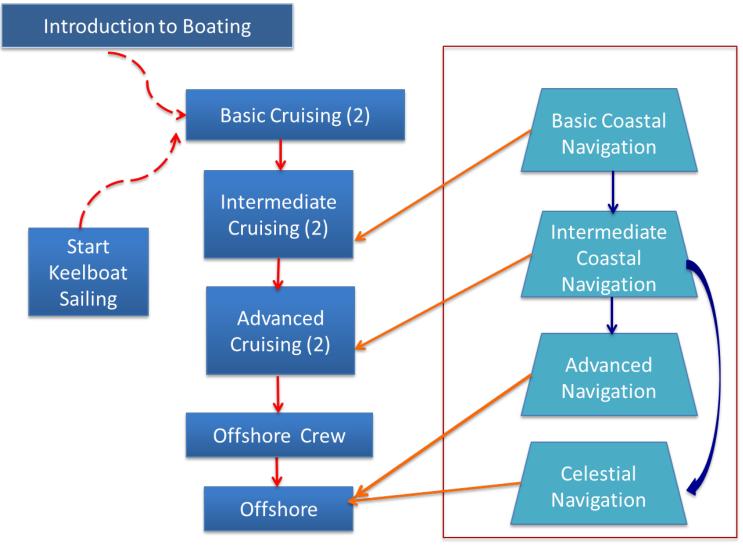
#### **Intermediate Coastal Navigation**

Ashore exam: Closed book

- 3 hours need 70% overall
- 2 sections ( A = theory & B = plotting)
  - Need 60% on each
  - Theory section 1/2 weighted,
     55% of exam
  - Plotting section is unweighted,
     45% of exam
  - Exam includes requirement to complete log pages
- Afloat In Advanced Cruising
- Course Length: Recommended minimum 15 hours (including exam)



## **Cruising Pathway**





## Powerboat Pathway

Introduction to Boating **Basic Coastal Basic Outboard** Navigation Intermediate **Basic Power** Coastal Navigation Intermediate Advanced Power Navigation Celestial Navigation



## Instructor Pathway

