

Electronic Navigation Essentials

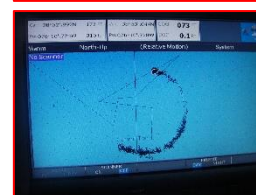
November 19, 2016 – 0930 to 1630 – Humber Bay Sailing Centre

Register at hbsailing.com

This course will guide you to develop an understanding of the most common electronic navigation tools and how to use them more effectively. You will also gain an understanding of the limitations of these electronic tools, enabling you to make navigational decisions that will enhance safety on your vessel.

Outline

- 0930 Welcome & Introductions**
Worksheet/Questionnaire - Navigating Techniques and Tools used on your vessel
Overview of the range of electronic tools available for Navigation and Collision Avoidance at sea.
Depth Sounder, Speed Log, GPS, Electronic Charts and Plotter, Radar, AIS, Autopilot
Which tools represents reality or the virtual world
Creating a safe environment – around your vessel
- 0945 The simple tools, rediscovered**
Understanding and utilizing the full potential of your depth sounder and speed log
- 1015 GPS Basics**
How it works and what information it can provide
Location, Speed Over Ground, Course Made Good
Comparing information to other instruments – Speed Log & Compass
Waypoints: Defining, Adding and Using.
Additional information that can be derived when using waypoints
- Velocity Made Good, Course to Steer, Estimated Time of Arrival, XTE
Limitations and Errors
- 1045 Break**
- 1100 Electronic Charts**
Raster vs Vector
- 1115 Electronic Charting Systems: Chart Plotters – Combining GPS and Electronic Charts**
Features, Functions, Benefits and Cautions/Limitations
Location of equipment and set up
Entering Waypoints, Planning Routes, Tracking, Alarms
Multi-Function Displays
- 1145 When things go wrong!**
Issues with over reliance on using one navigational tool
Case scenarios of incidents relating to over reliance on electronics
- 1200 Lunch Break**
- 1300 Review of questionnaires**
- 1310 Radar -** How it works, type and location of equipment, limitations
Screen, Set Up, Range Rings, Understanding Relative Motion
Deciphering targets, Gain, Sea Clutter, Rain Clutter
Collision Avoidance – ARPA, EBL and Trails
Navigation – VRM and Racon features
Weather Tracking
- 1515 Break**
- 1530 AIS -** Collision Avoidance
Communication assistance
AIS and the internet
- 1600 Autopilot** Equipment and Setup
Following a course/holding a point of sail
Go To Function
Power considerations and other limitations
- 1630 Wrap up**



Ken Gillstrom is a Sail Canada Advanced Cruising Instructor and RYA Yachtmaster Offshore. He has sailed over 68,000 miles, much of it with limited modern electronic tools. Ken and his wife, Carol set sail four years ago on their new custom designed and built aluminum sailboat, Voyageur 10.10. They sailed 45,000 miles including 2 Atlantic crossings, transited the Panama Canal, and on to – Galapagos, Hawaii, BC and Alaska. A number of articles Ken has written on boat related topics have been published by Pacific Yachting magazine. Ken and Carol are wintering in Vancouver awaiting their next adventures in 2017. While in Vancouver, Ken is the education coordinator for the Bluewater Cruising Association. He and his wife, Carol, conduct sail training adventures in the Pacific Northwest on board Voyageur 10.10

Presented by: **Ken Gillstrom | VOYAGEUR SAILING**

www.voyageursailing.com