## **Navigation**

Length: 12 Sessions, Group Outings as needed

## Cost:

This course is the second in the offshore navigation series. The course continues to develop celestial navigation theory and methods. The squadron has loaner sextants. Group outings are provided for taking



sights and additional sextant practice. Students receive a fully-functional version of the CapN navigational software, plus electronic charts; and a trial copy of Offshore Navigator, used for planning offshore voyages.

## Topics include:

- Taking sextant sights on additional celestial bodies such as the moon, stars, and planets
- Reducing sights from those bodies to produce a Line of Position for each category
- Combining celestial Lines of Position to determine a fix
- Sources of error in celestial techniques
- Reducing celestial sights using the Law of Cosines method and the Nautical Almanac method
- Electronic software tools for planning an offshore voyage
- Exercises using the CapN and Offshore Navigator software for planning offshore passages

Students complete a Navigation Sight Folder to demonstrate understanding of celestial sight reduction methods. The course contains a practice offshore cruise to integrate the various navigation techniques learned throughout the Piloting, Advanced Piloting, Junior Navigation, and Navigation courses.