



# CELESTIAL NAVIGATION

## CLASS STARTS

Thursday

April 2, 2009

Time 7:30-9:30 PM

## Place

Oakmont Yacht Club

11 Washington Avenue

Oakmont, PA 15139

## To Register

## Call or Email

R/C Robert Brandenstein, SN

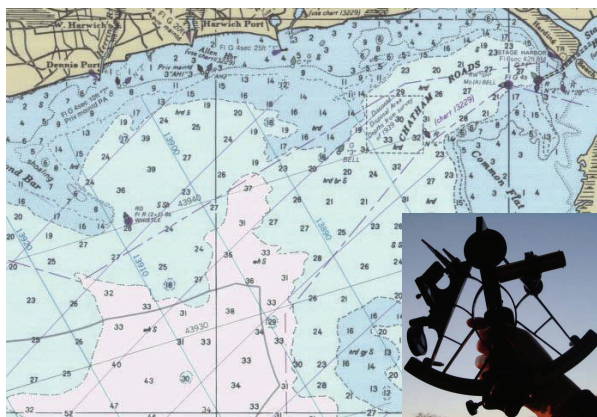
Rear Commander: (Bob)

724-728-2284

[robert.brandenstein@verizon.net](mailto:robert.brandenstein@verizon.net)

## Navigation 2009 Course Description

After Junior Navigation, this course is the second part of the study of offshore navigation, further developing the student's understanding of celestial navigation theory. This *Navigation 2009* course deals with learning celestial positioning using other bodies, in addition to positioning using the sun (covered in the *Junior Navigation* course). This course also deals with electronic software tools that can be used to plan and execute an offshore voyage. You will first learn to reduce



these sights by the *Law of Cosines* method. Later in the course, you will learn an additional method of sight reduction, the *Nautical Almanac Sight Reduction (NASR)* method. You will also learn about sight planning techniques. With that knowledge, you will have the tools to take sights and complete your Navigation Sight Folder. The course includes a chapter on using a software-based voyage planning tool and a navigation program. The final chapter of the course contains a Practice Cruise that ties the separate elements of the course together.

Nav 09 Student Kit includes the Student Manual, the CAPN software package with non expiring license (**\$400 retail value**), and a license to use the Visual Passage Planner 2 (VPP2) software for 6 months. The Student Kit also includes a pad of sight reduction forms, a pad of CLS forms, N.O. 974 Plotting Sheet, and Sight Folder Cover.

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**Cost: \$150.00**

## Navigation



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