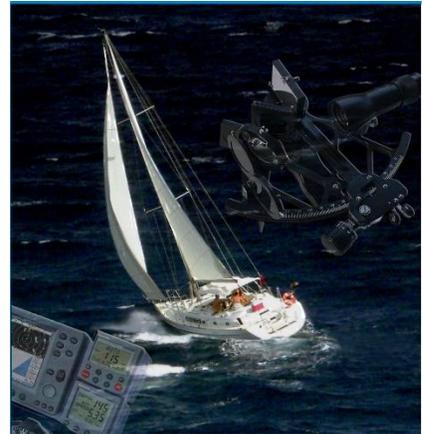


Offshore Navigation

Offshore Navigation (currently offered as Junior Navigation) is the first in a two-part program of study in offshore navigation, followed by the Celestial Navigation course (currently offered as [Navigation](#).). It is designed as a practical "how to" course. Subject matter includes:

- Precise time determination
- Use of the Nautical Almanac
- Taking sextant sights of the sun
- Reducing sights to establish lines of position
- Special charts and plotting sheets for offshore navigation
- Offshore navigational routines for recreational craft
- Electronic and computerized offshore navigation



In Junior Navigation, the student will continue to use GPS as the primary position sensor, as they learned to do in Marine Navigation and Advanced Marine Navigation. However, the offshore environment poses many different elements for consideration by the navigator. Ocean currents, wind, and sea state all affect a vessel's performance over the longer passages.

Also, visible terrestrial landmarks are no longer available to the navigator as reference points. In the Junior Navigation course, the student will learn to substitute celestial objects such as the sun as reference points. The course begins with the study of celestial navigation, teaching the student to take sights on the sun with a marine sextant and derive a line of position from that observation. Next, the student will apply the principles learned in Advanced Piloting, and plot a running fix from two sun sights taken about four hours apart. Once the student has learned the basics of celestial sight reduction, the course continues with planning, positioning, and checking one's position in the offshore environment, using both electronic and celestial tools.

The JN14 Instructor Manual for this course includes lesson plans for each chapter and comes with a PowerPoint CD that contains class presentations, quiz and homework answers. The chapter 13 Practice Cruise, and some other homework answers, shown in the Instructor Manual (IM) were calculated using appropriate mathematic methods to produce accurate reproducible answers. Students using the course required graphical methods, are not expected to obtain the identical answers as listed in the IM. Grading tolerances will be allowed.

There are two examination elements for the JN course, the Sight Folder and an Open Book Exam. The sight folder is graded at the squadron level. The [Sight Certification Form \(SC07\)](#) must be submitted with the completed open book exam for the exam to be evaluated when it is submitted to Headquarters.