

## **Celestial Navigation Self-Study Resources**

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This document provides suggestions for ASA or Sail Canada students wishing to meet the celestial requirements for ASA 108 or Sail Canada Offshore Cruising.

BOSS does not currently offer a celestial navigation course, as there is not time to teach it in advance of an offshore passage. Instead, we offer this listing of self-study resources. In the case of ASA, we can administer an exam for ASA 117 Basic Celestial Endorsement, or ASA 107 Celestial Navigation before we depart. See below for suggestions on challenging the Sail Canada celestial exam.

Here are links to the relevant standards:

ASA 107: <https://asa.com/certifications/asa-107-celestial-navigation/>

ASA 117: <https://asa.com/certifications/asa-117-basic-celestial-endorsement/>

Sail Canada Celestial: <https://www.sailing.ca/uploads/2021/03/Celestial-Navigation-22-February-2021.pdf>

### **Celestial Navigation Courses**

If you wish to take a formal course, there are various in-person and online options.

For ASA courses, following the link to:

<https://asa.com/certifications/asa-107-celestial-navigation/> or

<https://asa.com/certifications/asa-117-basic-celestial-endorsement/> , then scroll down and click “Show List of Schools”

For Sail Canada, follow the link to:

<https://members.sailing.ca/index.php?action=search.searchAvailableNAV> , then use the pulldown menu to select “Celestial Navigation Instructor”

### **Self-study Resources**

If you wish to learn celestial on a self-study basis, an internet search for “celestial navigation text” will generate a long list of possibilities. Here are some selected resources you could consider.

### **For ASA 117**

The official text for ASA 117 is *GPS Backup With a Mark 3 Sextant*, by David Burch. This can be ordered from Starpath at <https://www.starpath.com/catalog/books/1997.htm> . Alternatively, it is available from other online booksellers, and is also available as a ebook.

### **For ASA 207 or Sail Canada Celestial**

Alternatives include:

Resources offered by the Maryland School of Sailing and Seamanship, linked from the ASA 107 page here: [http://www.mdschool.com/1celestial\\_nav.htm](http://www.mdschool.com/1celestial_nav.htm)

Appear to be available in hard copy only.

*Celestial Navigation*, by David Burch: <https://www.starpath.com/catalog/books/1887.htm> Available in printed and ebook formats. Burch is a prolific author of books on marine weather and navigation. Additional resources used in the self-study course are here: <https://www.starpath.com/celnavbook/>

*Celestial Navigation* by Dominique Prinnet: <https://books.friesenpress.com/store/title/119734000014535607/Dominique-F-Prinnet-Celestial-Navigation> Available in printed and ebook formats. These are the recommended texts for Sail Canada Celestial Navigation.

The separate exercises book is available here: <https://books.friesenpress.com/store/title/119734000028555333/Dominique-F-Prinnet-Celestial-Navigation-Exercises-for-Class-and-Home-study>

Additional details and resources are here: <http://www.marinenavigationbooks.com>

### **Challenging the Celestial Exam**

If you wish to obtain a certification, you need to write, or “challenge” the exam. In the case of ASA 107 or 117, as noted above, you can write the exam with BOSS before departing on your 108 Offshore Course.

In the case of Sail Canada, you can “challenge” the exam under the supervision of a qualified Sail Canada celestial instructor. Use the procedure note above to find an instructor near you. Alternatively, contact me at [rob.m@barefootoffshore.com](mailto:rob.m@barefootoffshore.com), and I can help make a contact for you.

### **Coming soon**

We are working on an Emergency Navigation course that will combine the skills and knowledge covered in ASA 117 with additional resources relevant for

emergency navigation if all of your electronics fail when you are offshore. Additional details will be available in August, 2021.

### **Other Relevant Online and Offline Resources**

To implement celestial navigation, you need:

- A nautical almanac
- Sight reduction tables
- Sight reduction forms and plotting sheets

#### *Online resources*

Nautical Almanac: free online versions for various years can be downloaded here: <https://www.thenauticalalmanac.com>

Everything you need for 2021: [https://thenauticalalmanac.com/Everything\\_You\\_Need\\_For\\_2021.html](https://thenauticalalmanac.com/Everything_You_Need_For_2021.html) Provides links to the almanac, various corrections tables, sight reduction tables, star data, sight reduction forms, etc.

Another free online version of the nautical almanac and other resources: <https://www.nauticalalmanac.it/en/navigation-astronomy/the-nautical-almanac.html>

Forms: Tony Pattison of [YNotSailing.com](http://YNotSailing.com) supervised my celestial exam. He has designed various useful forms: <https://www.ynotsailing.com/Celestial/tools.html>

#### *Offline resources*

If you are going offshore, you will need paper copies in case your electronics fail. While there are many sources, the specialized online retailers I have used for almanacs, sight reduction tables, charts, etc are:

US source: <https://mdnautical.com>

Canadian source: [nauticalmind.com](http://nauticalmind.com)