

*BOOK REVIEW***Integrated Bridge Systems Vol 2
ECDIS and POSITIONING**

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215 p.

One of the challenges of the ECDIS technology is to understand how all the components fit together from a practical mariner's perspective. To operate this technology, the mariner needs to have a good appreciation of the positioning technology and its characteristics regarding accuracy and integrity; the underlying Electronic Navigation Chart (ENC) data presented to the mariner (in comparison to a traditional paper chart product); and how to operate and interpret the software (ECDIS) to ensure the data is optimally displayed and understood.

This book has been especially written for the mariner and not for hydrographers or engineers. Like any software application, the benefit of its use depends upon how the user interacts with it and how much they understand its operations. Whilst the first 6 chapters of this book describe the technology, the key chapters follow in that they describe how to use ECDIS for various navigation practices such as route planning (Chapter 7), route monitoring (Chapter 8) and how to use ECDIS when an Electronic Navigation Chart (ENC) is not available (Chapter 9). The reader should pay particular attention to Chapter 10 regarding training and the Familiarisation Checklist which provides an important resource for users to develop and test their skills.

The book is well written in English, is well designed and has numerous clear illustrations to expand on the text.

The book is divided into three sections. Chapter 1 provides an overview of positioning and geodetic fundamentals. Chapter 2 describes the modern electronic positioning technologies including GPS, GLONASS, Galileo, eLORAN, differential systems, inertial systems and the use of radar and other visual information. Chapters 3 to 10 provide a comprehensive treatise on the use of electronic charts for navigation and provide a satisfactory level of information for a practical course based on the IMO Model Course 1.27 for ECDIS.

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