



# Chart Basics

A guide to charts and marine publications  
and how to read them

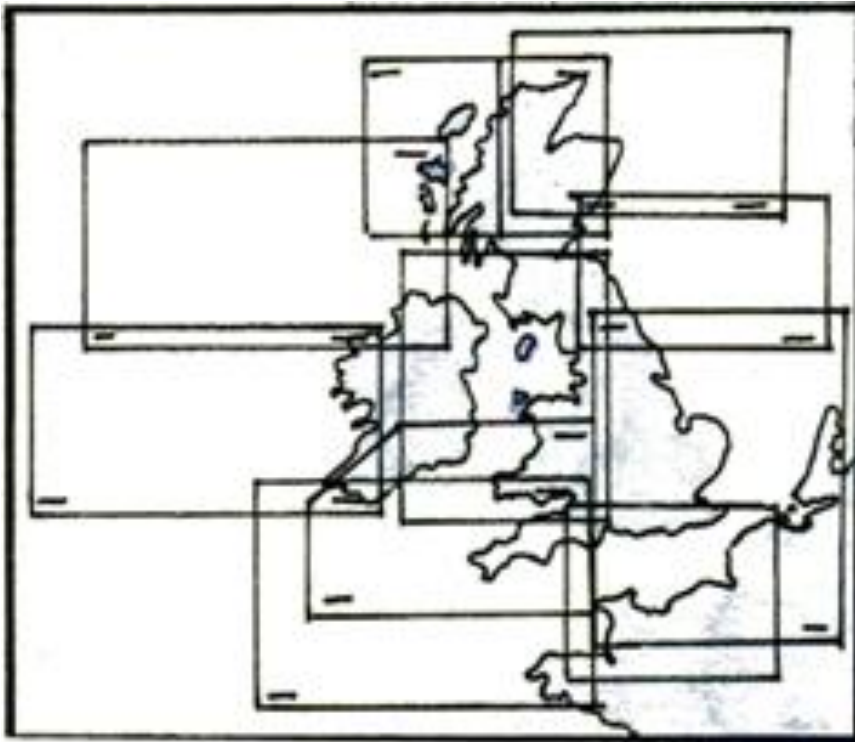
# Introduction

**This presentation takes you through the basic information on marine charts and other marine publications**



# Types of Chart

A number of agencies in different countries produce charts



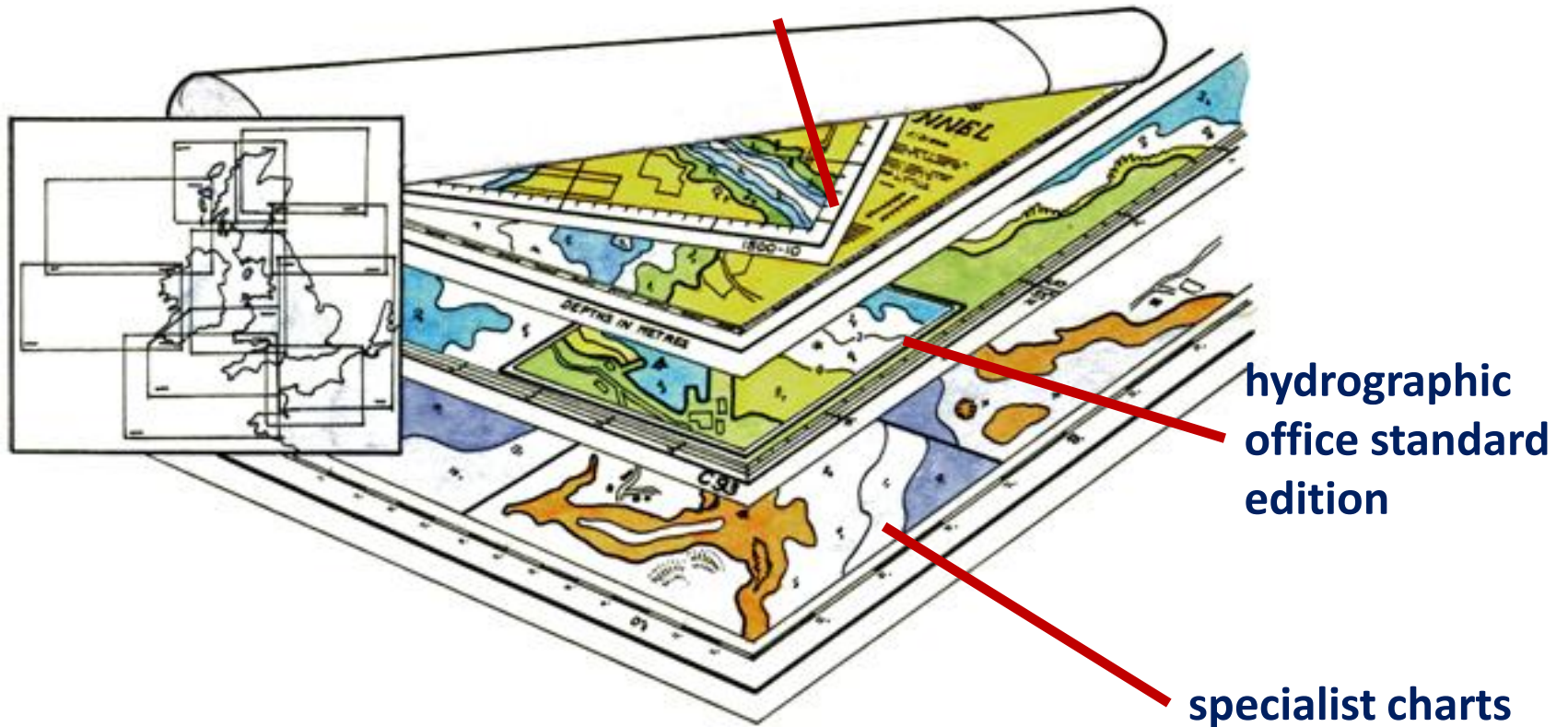
A chart catalogue shows the coverage available within various folios





# Standard Charts

small craft charts



# Small Craft Folios

Usually contain ten or more charts...

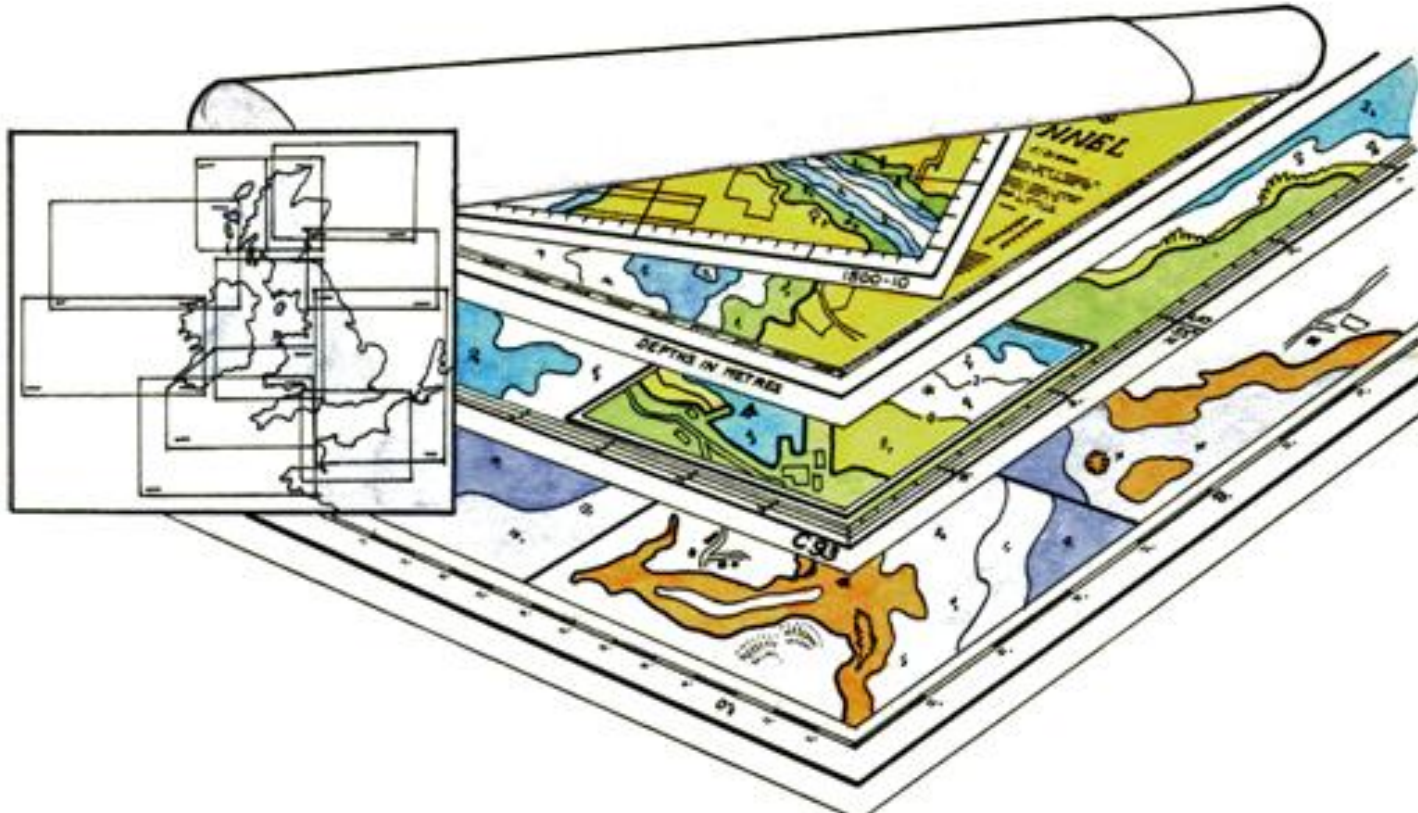


Designed for use where chart table space may be limited, they cover many popular sailing areas around the world



# Chart Maintenance

Charts should be kept up to date...

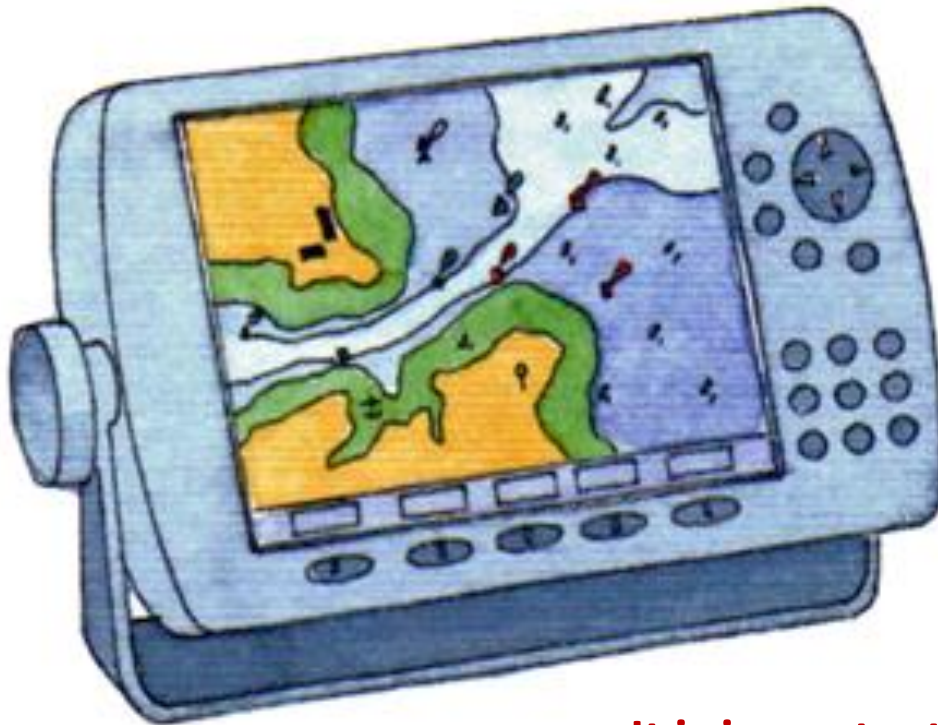


Corrections can be found in the Hydrographic Office 'Notices to Mariners'



# Electronic Charts

Electronic charts are now very popular, they can be displayed on a dedicated plotter, PC, tablets and even smart phones

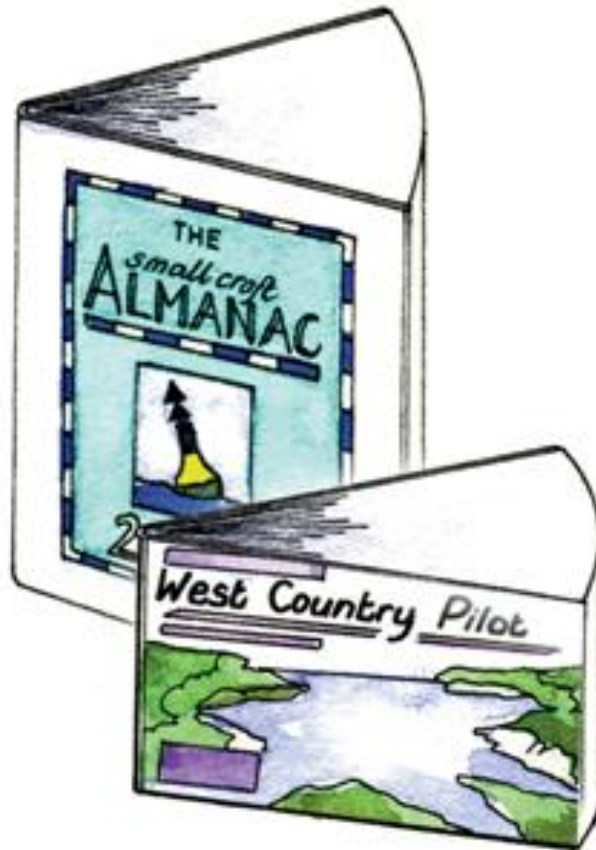


Updates are available on CD ROM or via the internet

It is important, however, to also carry paper charts in case of electronic failure or mishap

# Almanacs & Pilots Books

**Dedicated pilot books are often available for specific areas**

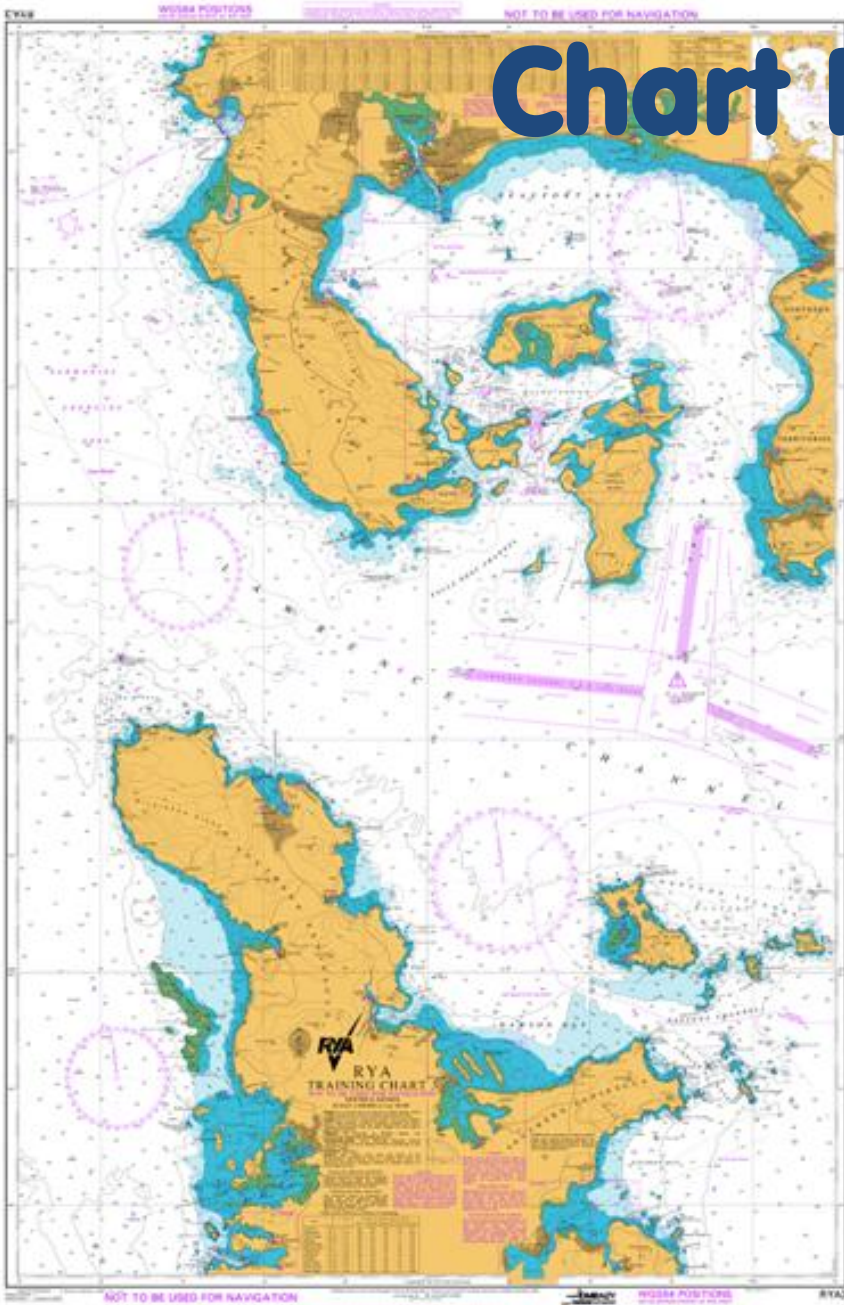


**Small craft almanacs give information on topics such as:**

**....tidal heights and streams, pilotage and passage planning, weather and communications**



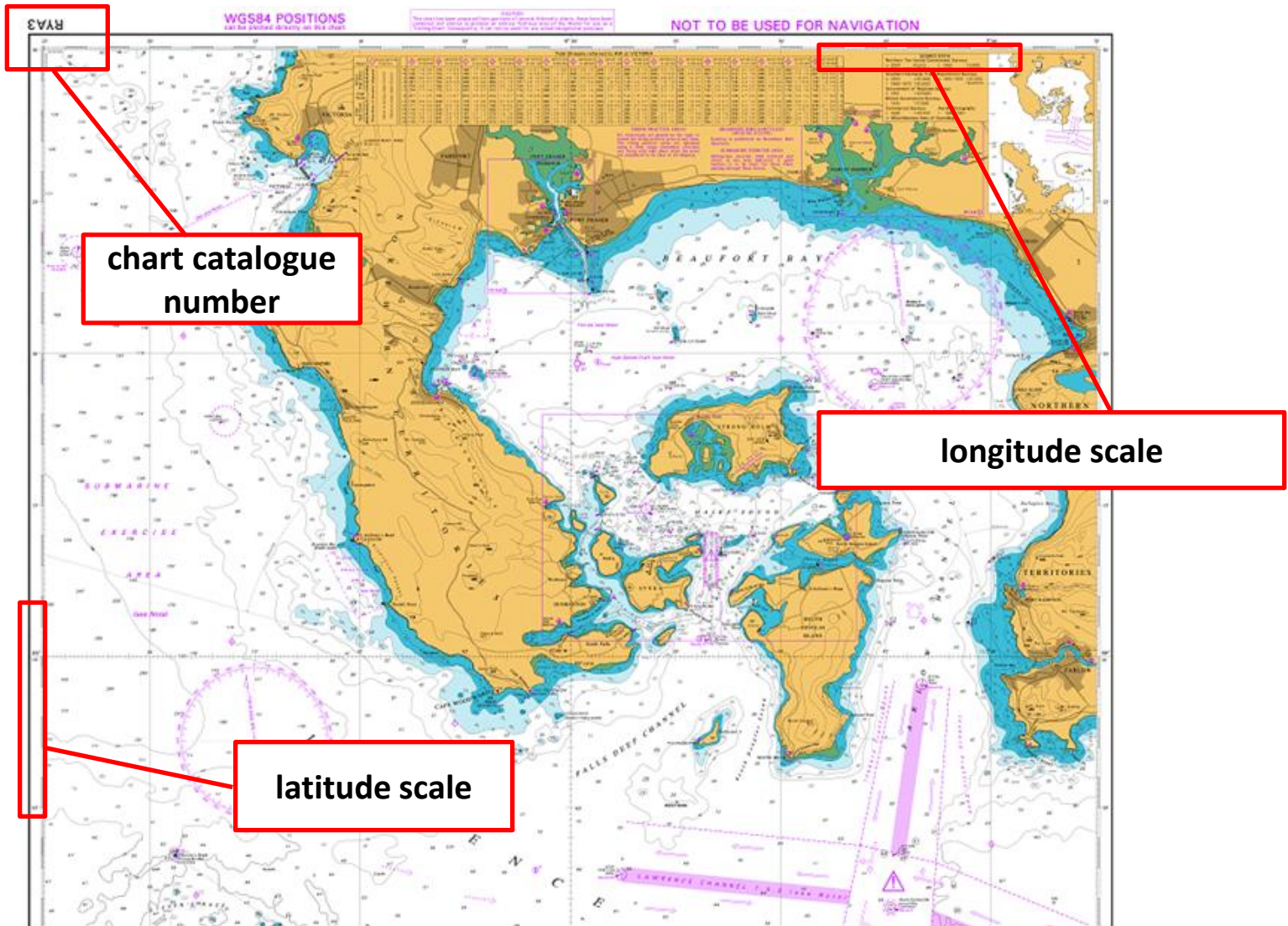
# Chart Features



**A chart is packed with information, much of which is abbreviated...**

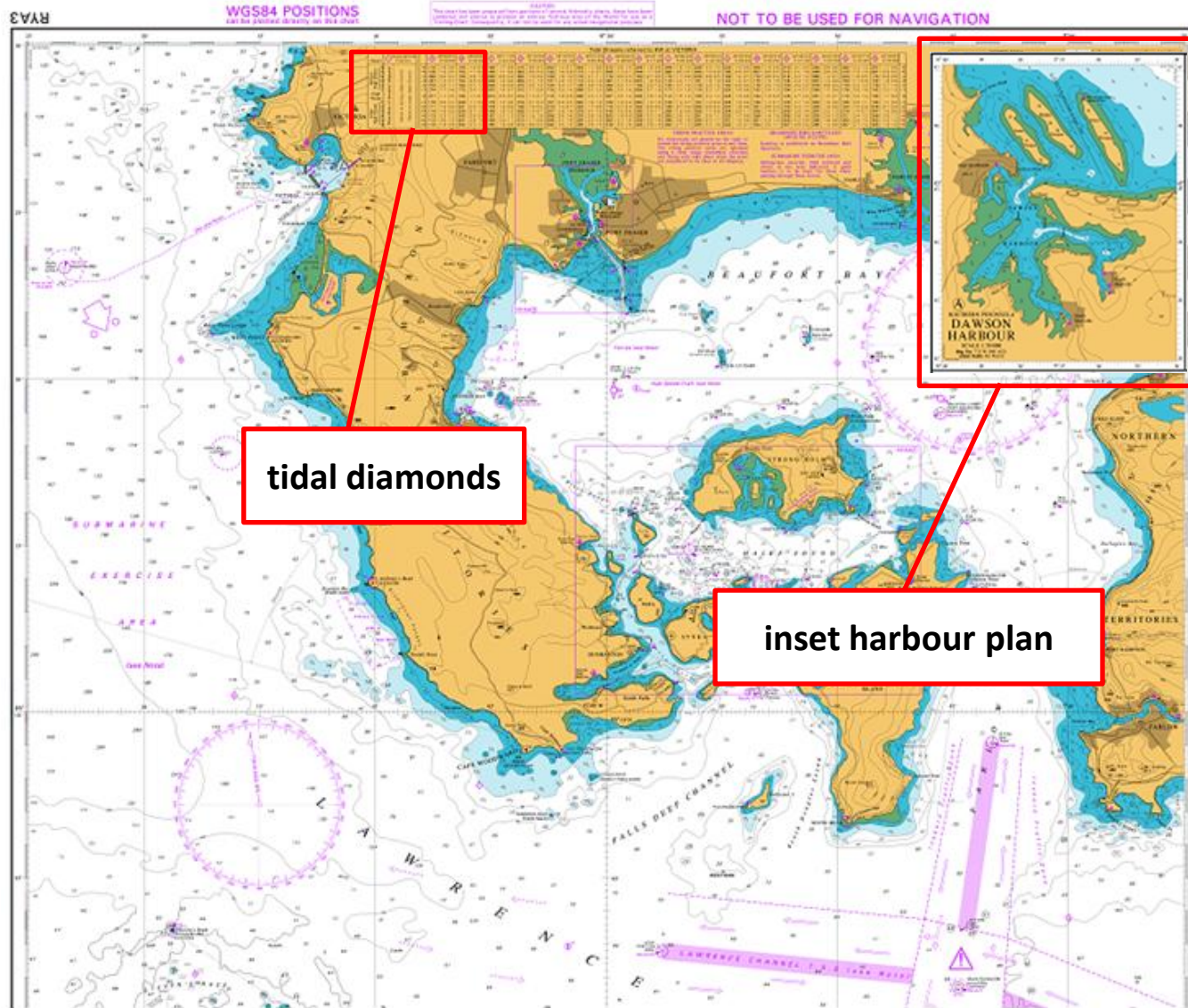
**...and it's important that navigators understand how to read these**

# Chart Features



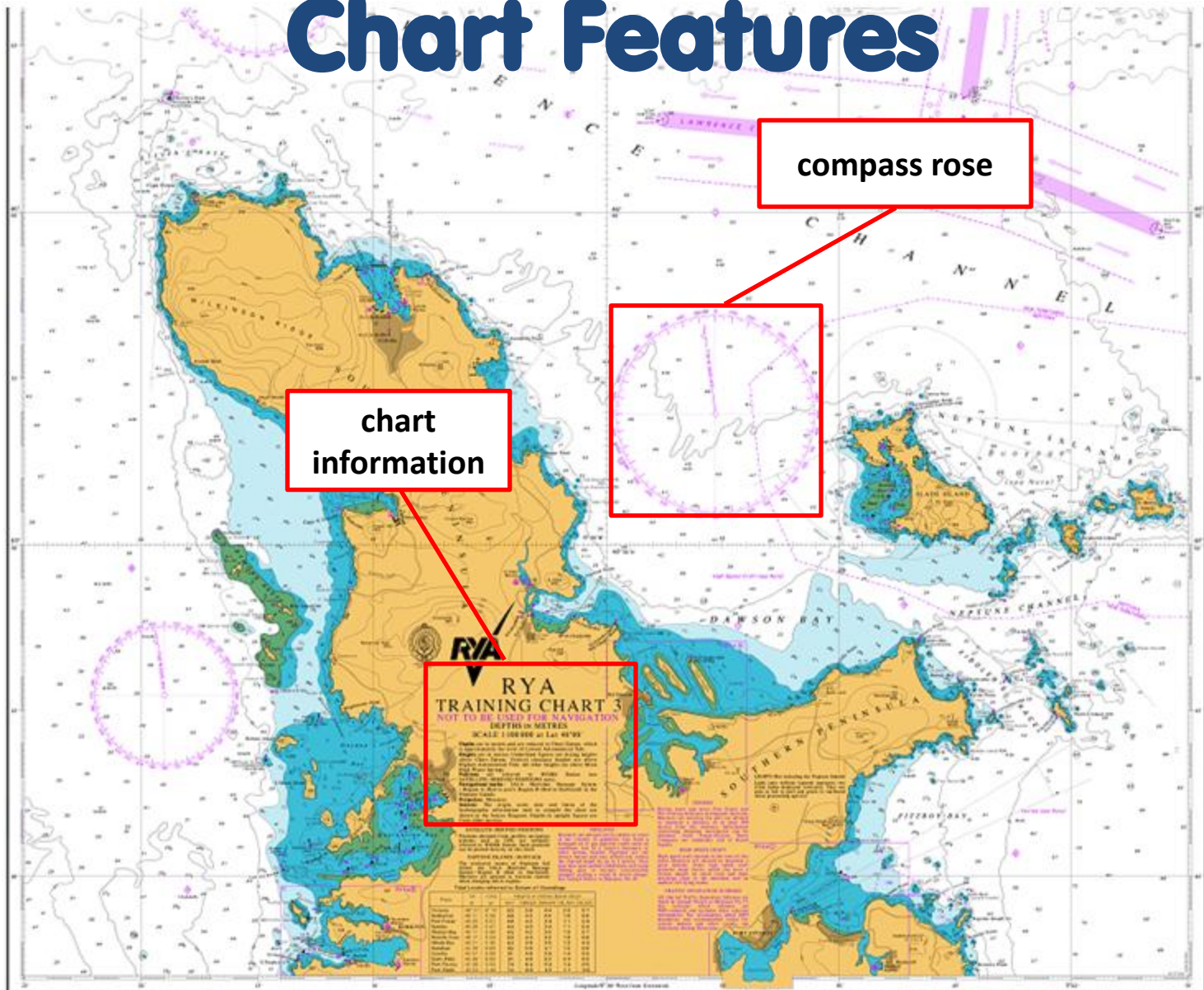


# Chart Features





# Chart Features



# Chart Features

scale: 1 unit of distance on this chart = 100,000 units on the earth's surface

chart title

geodetic datum

**RYA**  
**TRAINING CHART 3**  
NOT TO BE USED FOR NAVIGATION  
DEPTHS IN METRES

SCALE 1:100 000 at Lat 46°00'

chart projection

**Depths** are in metres and are reduced to Chart Datum, which is approximately the level of Lowest Astronomical Tide.

**Heights** are in metres. Underlined figures are drying heights above Chart Datum. Vertical clearance heights are above Highest Astronomical Tide. All other heights are above Mean High Water Springs.

**Positions** are referred to WGS84 Datum (see SATELLITE-DERIVED POSITIONS note).

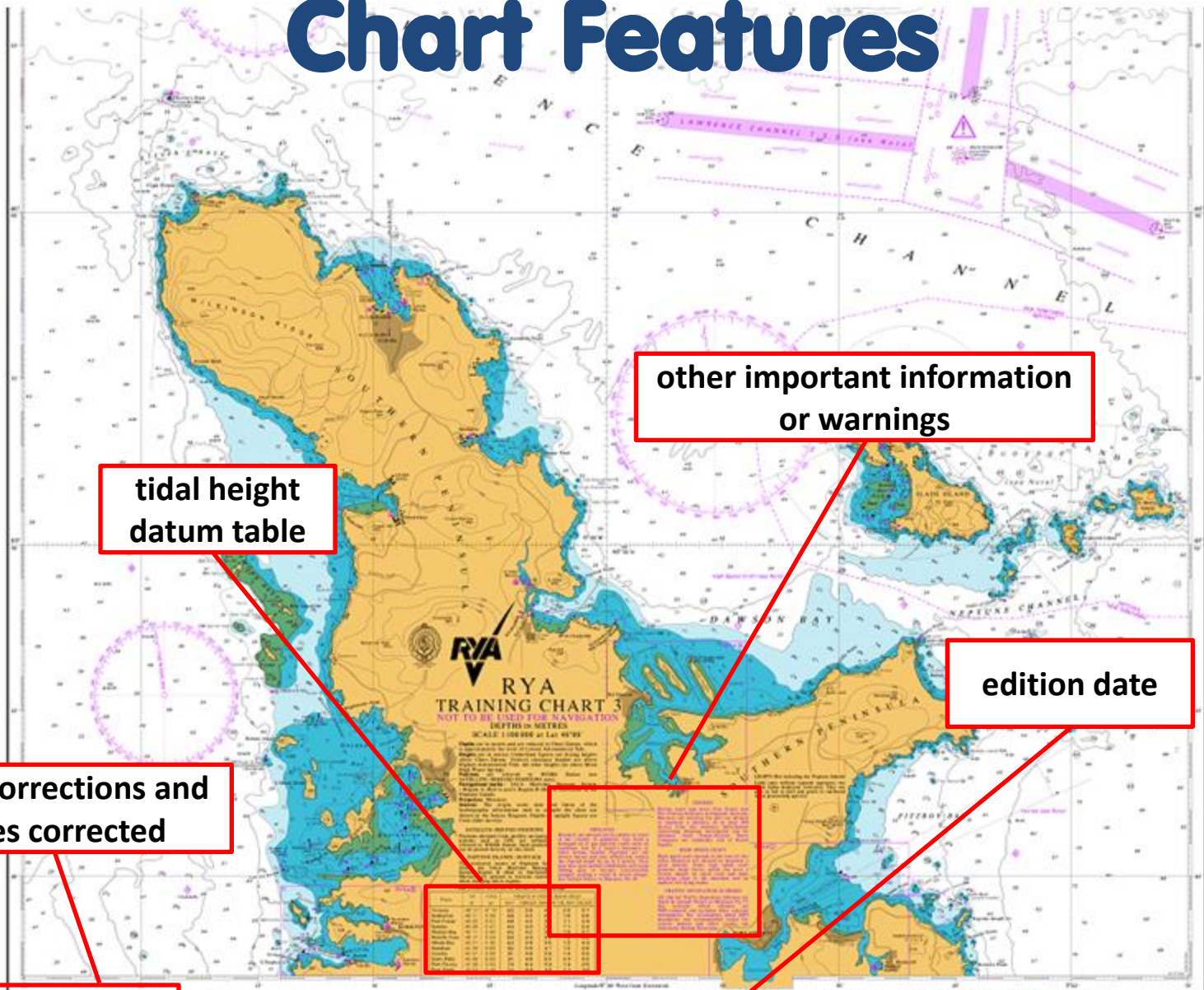
**Navigational marks.** IALA Maritime Buoyage System - Region A (Red to port); Region B (Red to Starboard) in the Neptune Islands.

**Projection:** Mercator.

**Sources:** The origin, scale, date and limits of the hydrographic information used to compile the chart are shown in the Source Diagram. Depths in upright figures are from older surveys.



# Chart Features



tidal height datum table

small corrections and dates corrected

other important information or warnings

edition date

NOT TO BE USED FOR NAVIGATION

1<sup>st</sup> Edition Jan 2007

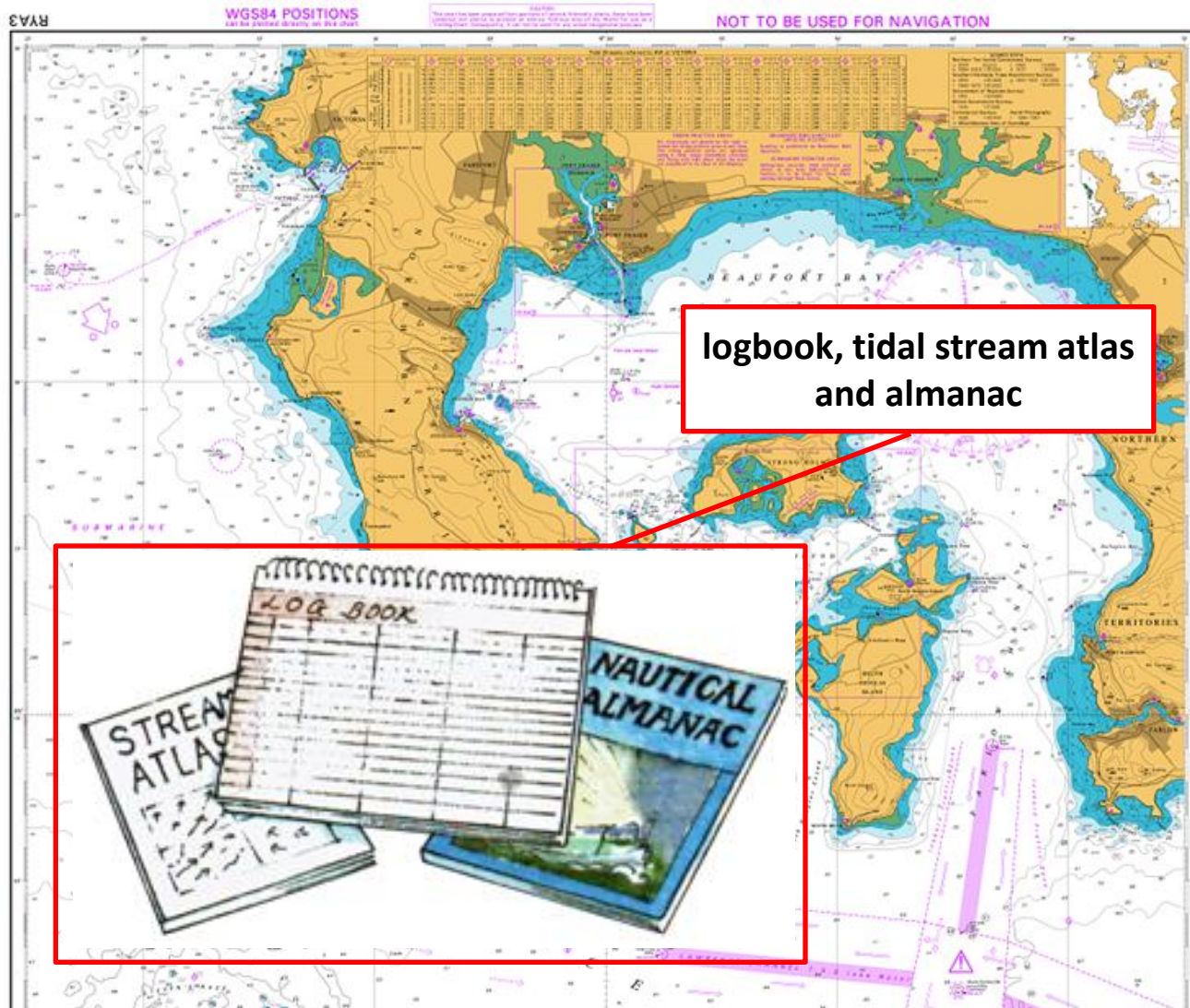
WGS84 POSITIONS can be printed directly on the chart

RYA3



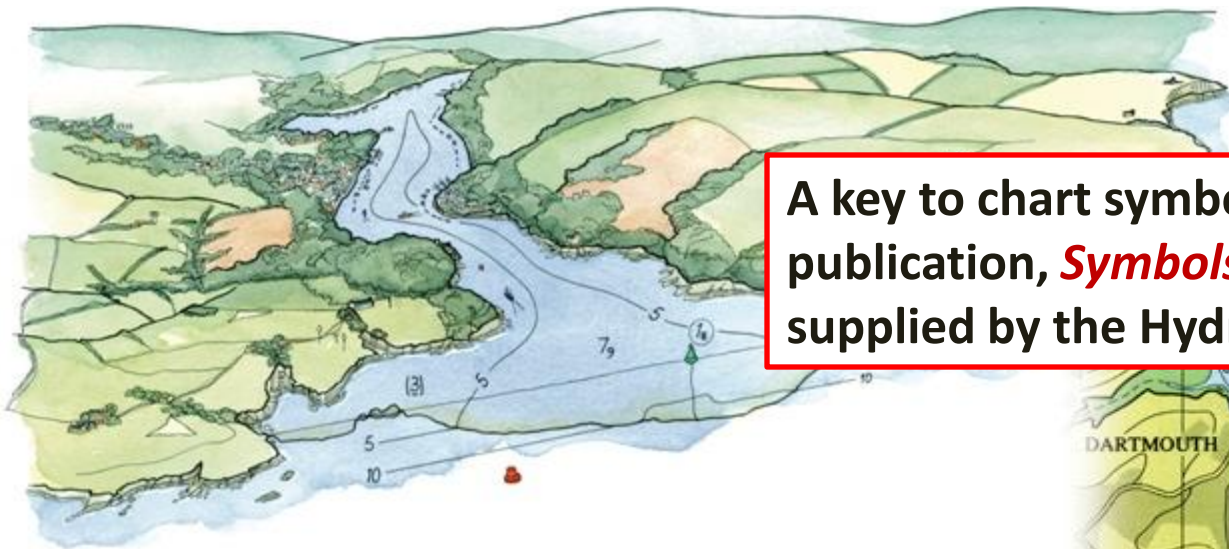


# Chart Features



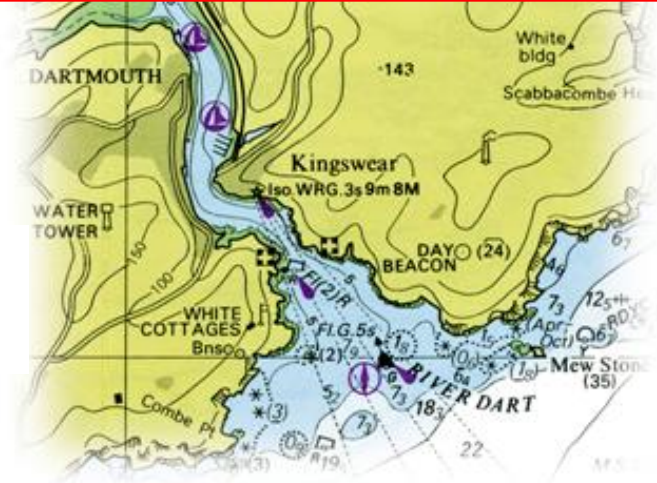
# Symbols & Abbreviations

Like land maps, charts use symbols and abbreviations to show useful and important features



A key to chart symbols can be found in the publication, *Symbols and Abbreviations* supplied by the Hydrographic Office

For the purposes of this course they can also be found in the RYA Training Almanac



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## Further Reading



We highly recommend Tim Bartlett's  
**RYA Navigation Handbook (G6)**

You can buy a copy of this book by visiting our on-line shop

[www.penguinsailing.com](http://www.penguinsailing.com)