

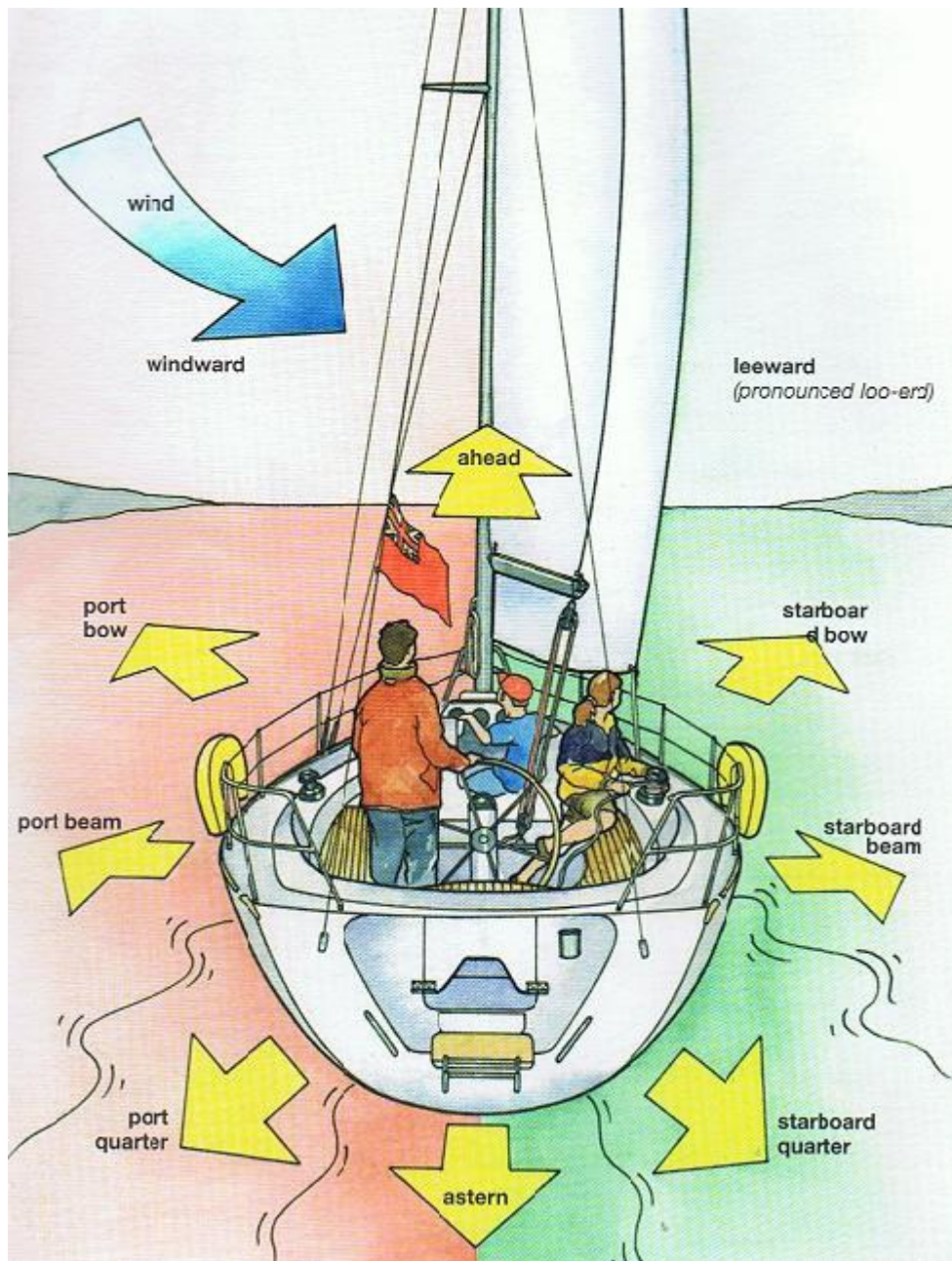


## ESSENTIAL NAVIGATION PRECOURSE READING MATERIAL

Thank you for booking with Endeavour Sailing for your Essential Navigation and Seamanship Course and the following literature has been designed to help you start to understand some of the terminology we will be using during the course.

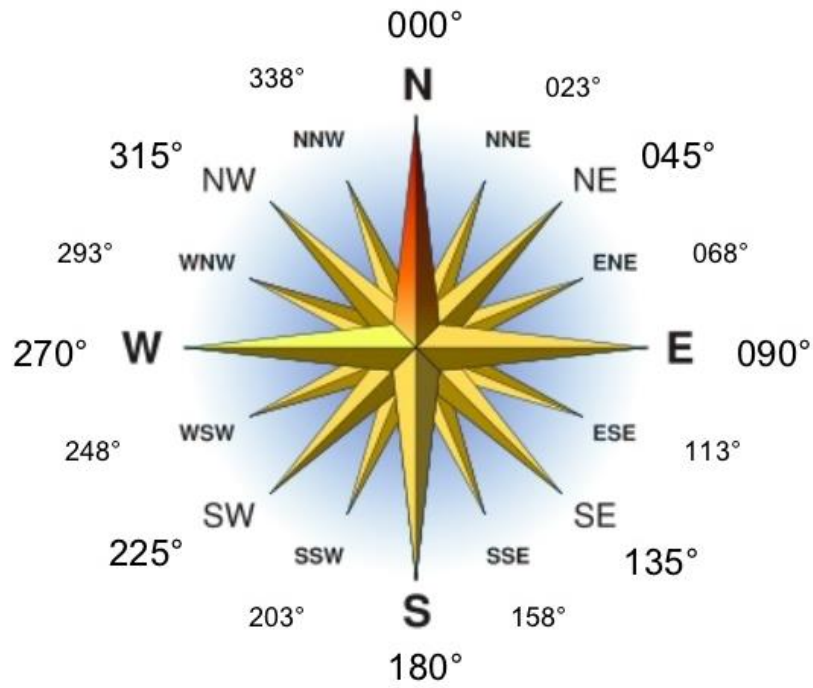
I can also suggest purchasing the  
RYA COMPETENT CREW SKILLS

ISBN: 978-1-906435-90-5 RYA Order Code CCPCN/20

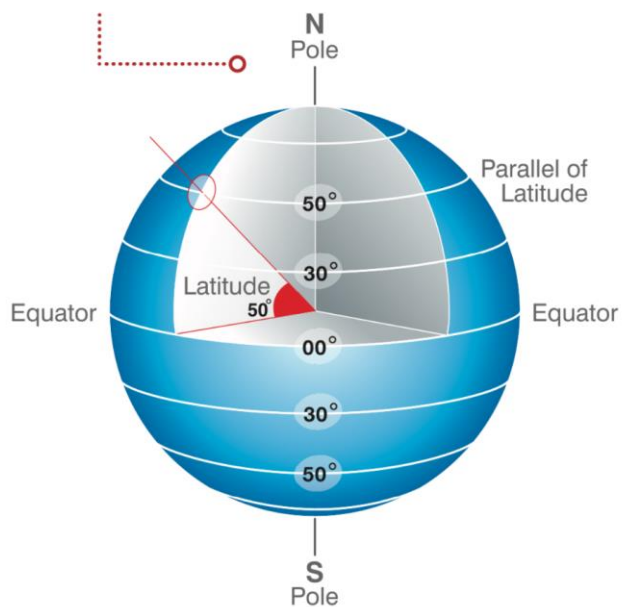


## NAVIGATION

### COMPASS

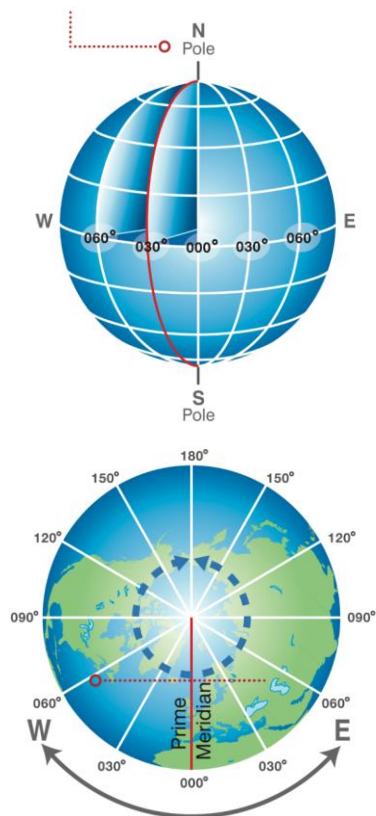


Latitude is measured north or south of the Equator.



LATITUDE SCALE: runs up and down the side of the chart

Longitude is measured east or west from the Greenwich Meridian.



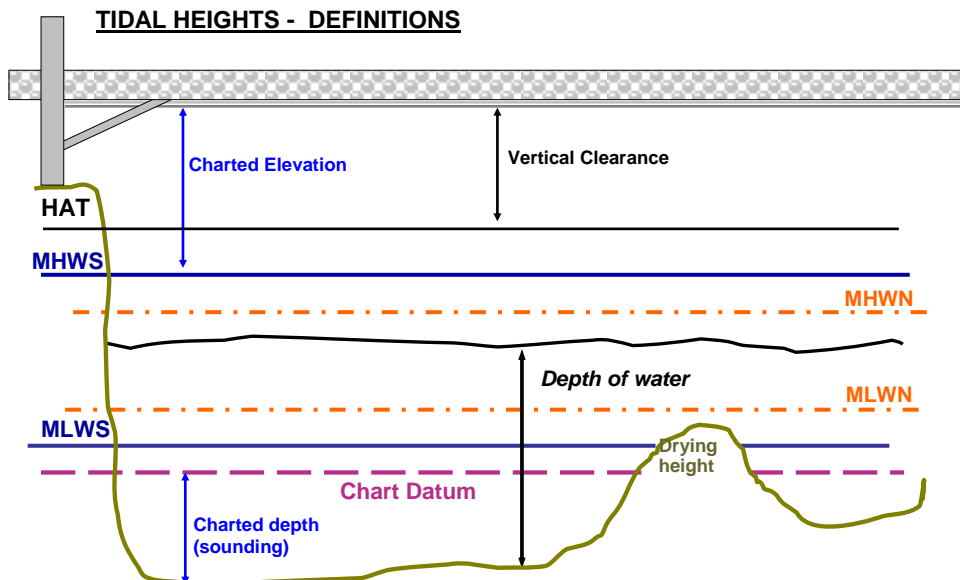
LONGITUDE SCALE: runs across the top and the bottom of the chart

TIDES

**TIDE TABLE**

GMT		ENGLAND – DOVER											
TIME ZONE UT(GMT)		LAT 51°07'N LONG 1°19'E											
TIMES AND HEIGHTS OF HIGH AND LOW WATERS													
JUNE				JULY				AUGUST					
Time	m	Time	m	Time	m	Time	m	Time	m	Time	m		
<b>1</b> 0330	5.8	<b>16</b> 0241	6.1	<b>1</b> 0349	5.7	<b>16</b> 0323	6.2	<b>1</b> 0442	5.3	<b>16</b> 0514	5.7		
M 1047	1.7	TU 1004	1.4	1046	1.8	1043	1.3	1123	2.1	1218	1.8		
M 1554	5.9	TU 1513	6.2	W 1609	5.8	TH 1553	6.3	SA 1703	5.4	SU 1745	5.8		
2314	1.7	2235	1.4	2316	1.8	2316	1.3						
<b>2</b> 0426	5.5	<b>17</b> 0342	5.9	<b>2</b> 0442	5.4	<b>17</b> 0426	5.9	<b>2</b> 0004	2.1	<b>17</b> 0100	1.8		
TU 1139	2.0	1058	1.8	1131	1.8	1131	1.8						
TU 1650	5.6	W 1616	6.0	TH 1703	5.6	1703	5.6						
		2336	1.5										
<b>3</b> 0011	1.9	<b>18</b> 0456	5.8	<b>3</b> 0009	1.8	<b>18</b> 0456	5.8 m HW	} Range 4.1 metres					
W 0528	5.3	1205	1.7	F 0543	5.3	1205	1.7 m LW						
W 1241	2.1	TH 1727	5.9	F 1234	1.8	1727	5.9 m						
1754	5.5			1804	1.8								
<b>4</b> 0113	2.0	<b>19</b> 0046	1.5	<b>4</b> 0113	2.0	<b>19</b> 0046	1.5						
0639	5.3	0617	5.7	0648	5.3	0617	5.7						
TH 1344	2.1	F 1318	1.7	SA 1344	2.1	F 1318	1.7						
1904	5.5	1842	5.9	1909	5.5	1842	5.9						
<b>5</b> 0213	1.9	<b>20</b> 0155	1.4	<b>5</b> 0216	1.9	<b>20</b> 0237	1.5	<b>5</b> 0336	1.7	<b>20</b> 0459	1.4		
0746	5.4	0730	5.9	0747	5.4	0814	5.8	0853	5.8	1000	6.2		
F 1444	2.0	SA 1426	1.5	SU 1448	2.0	M 1510	1.6	W 1606	1.6	TH 1721	1.2		
2007	5.7	1952	6.1	2006	5.6	2040	6.0	2111	6.0	2229	6.3		

Tidal Heights



Tidal Streams (calculated from the reference port)

**TIDAL DIAMONDS & DATUMS**

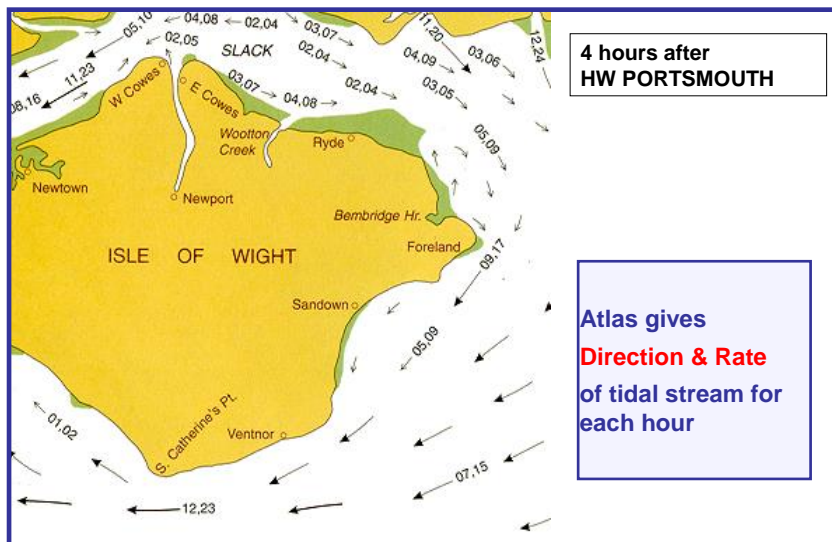
Hours	A 50°09'05 N 4 44.95W		
Before High Water	6	286	1.6 0.8
	5	290	2.8 1.4
	4	302	3.2 1.6
High Water	3	318	2.9 1.5
	2	323	1.7 0.9
High Water	1	000	1.0 0.5
High Water	0	080	1.3 0.6
	1	100	2.4 1.2
After High Water	2	111	2.5 1.3
	3	124	2.6 1.3
High Water	4	126	1.9 1.0
	5	148	0.5 0.2
High Water	6	283	1.1 0.5

3 hours before HW

Stream setting towards 318(T)

Springs  
2.9 kn  
Neaps  
1.5 kn

**TIDAL STREAM ATLAS**

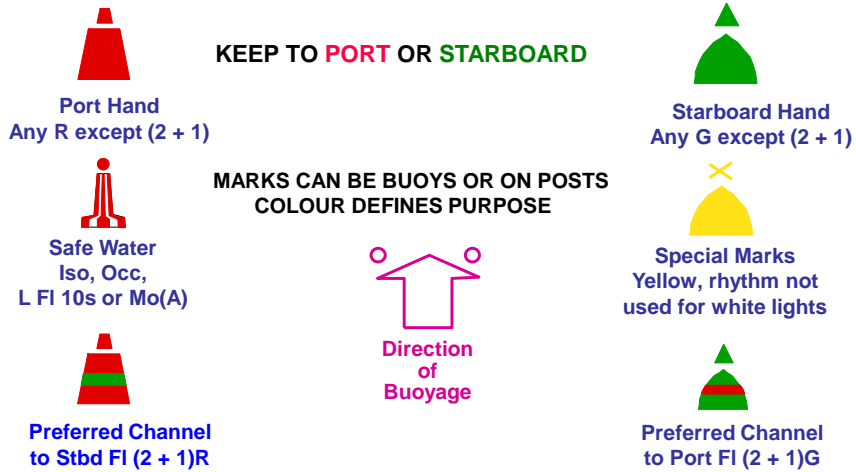


4 hours after HW PORTSMOUTH

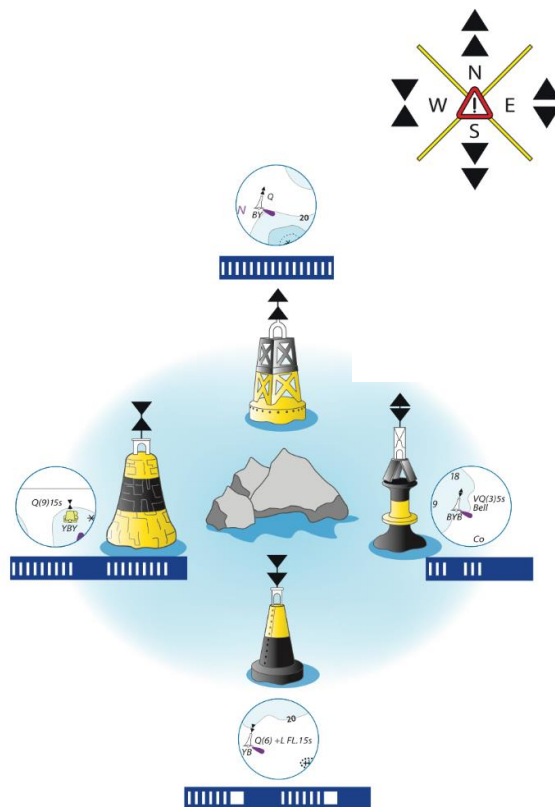
Atlas gives Direction & Rate of tidal stream for each hour

## BUOYAGE

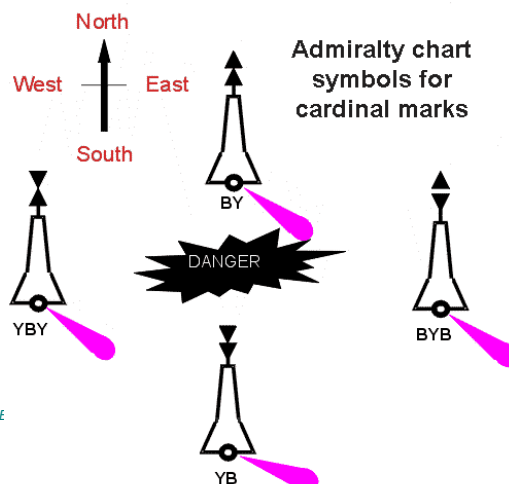
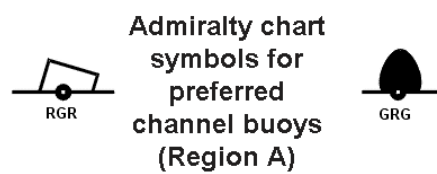
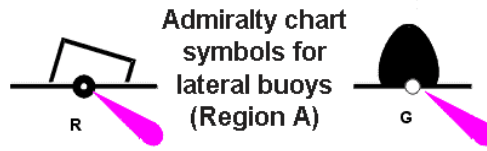
### LATERAL AND OTHER BUOYAGE



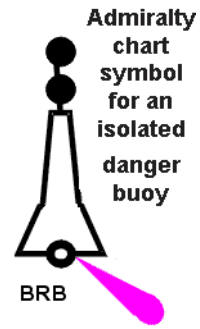
### Cardinal Buoys



How they would appear on the chart..











## **International Regulations for Preventing Collisions at Sea (IRPCS) (summarised)**

This is a summarised overview of the IRPCS for the main points you will need to know for Day Skipper Level.

- The rules apply anywhere on the sea of waters connected to it (subject to local by-laws)
- Keep a good lookout at all times by all means available (sight, sound, radar)
- Maintain a safe speed for the conditions - hazards, tide, traffic, sea state, visibility, depth, manoeuvrability, background lights.
- The words "Right of Way" do NOT occur in the rules. A "STAND ON" vessel should maintain its course and speed until it is clear that the "GIVE WAY" vessel is not taking avoiding action. Then all vessels must keep clear.
- Action taken to avoid a collision should be positive, early and safe. At night show a different aspect of your lights.
- A risk of collision exists if a bearing by compass, radar or transit stays constant and the distance between the two vessels is decreasing.
- Navigate on the starboard side of a channel.
- When crossing a shipping lane or traffic separation scheme keep your heading at right angles to the traffic.

### **General Rules for Priority**

Not under Command (NUC)  
Restricted in Ability to Manoeuvre (RAM)  
Constrained by draught (CDB)  
Fishing  
Sailing  
Power

### **Exceptions to the rules**

- There is no "GIVE WAY" vessel in FOG. If you hear any vessel ahead, sound your signal, slow down but keep steerage on, stop if necessary, navigate with extreme caution until the danger has past.
- Give way to ships in Narrow Channels or Traffic Separation Schemes (TSS)
- Overtaking vessels keep clear. You are overtaking if you are in the arc of the other vessel's stern light.

### **Sailing Rules**

- Starboard tack v Port tack - port tack gives way
- Boats on same tack - Windward boat gives way

### **Motor Rules**

- Boats meeting head on - both turn to starboard, pass port to port, Make a sound signal - one short blast.
- Boats crossing - the boat which has the other on her starboard side gives way.