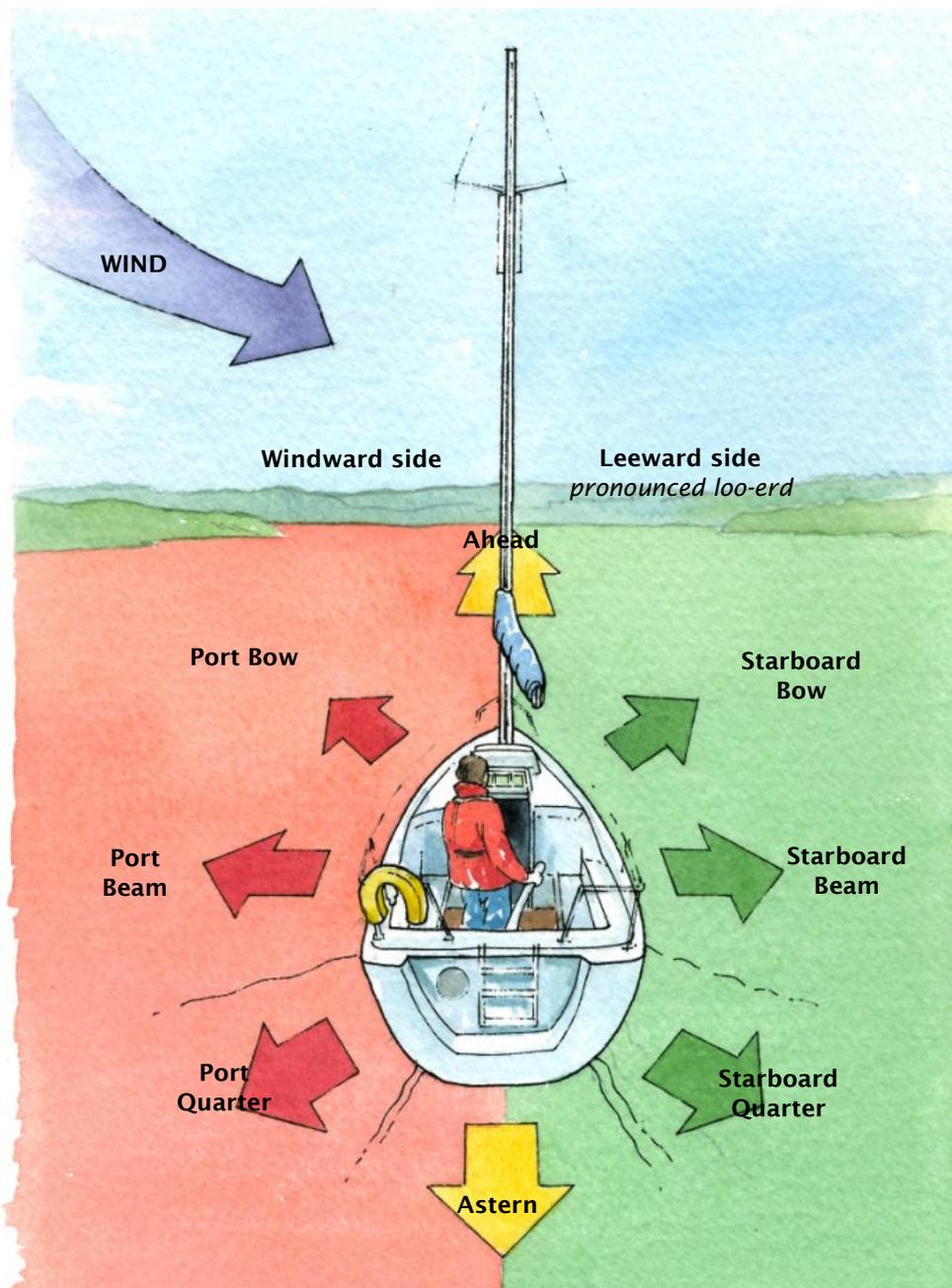
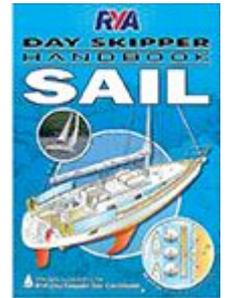


## Thank you for booking your Day Skipper Combined course with Endeavour Sailing

The following literature has been designed to help familiarise you with the terminology and principles that you will be learning on the course. These notes are not designed to be a comprehensive teaching tool, just a reminder of the Competent Crew practical skills and an introduction to the Day Skipper theory knowledge. Please print this out as it will be a useful tool during the classroom sessions.

The **Day Skipper Handbook (G71)** by Sara Hopkinson is a highly recommended purchase prior to the course.



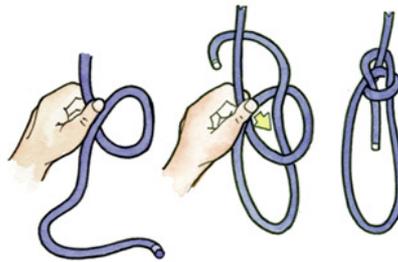
You will be “learning the ropes” during your time with Endeavour Sailing. There are a few knots to learn, some of which you will use a lot during the course. Some very helpful knot-tying videos are available on YouTube.

**Round turn & two half hitches**



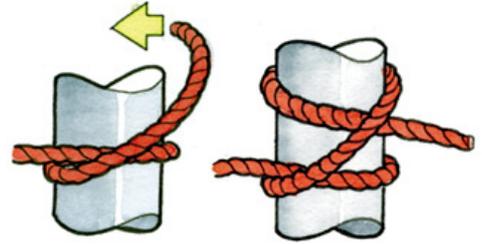
Multipurpose knot which can be untied under tension. Used for mooring lines and fenders

**Bowline**



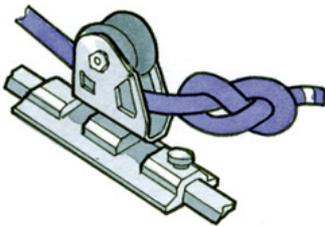
Very secure knot but cannot be untied if under tension. Used for mooring lines

**Clove Hitch**



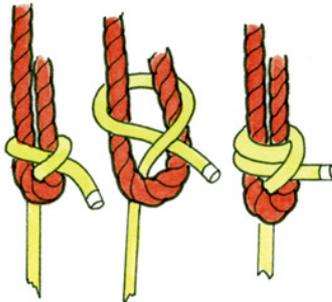
Can be easily adjusted and is ideal for securing fenders

**Figure of Eight**



Acts as a stopper knot to prevent a rope from escaping

**Double & Single sheet bends**



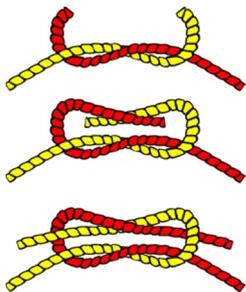
Used to join two ropes of different thicknesses

**Rolling Hitch**



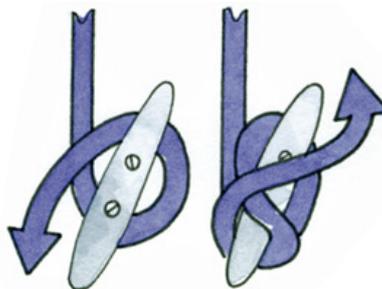
Ideal for taking the strain off another rope

**Reef Knot**



Used to join ropes of equal thickness together or to tie up a sail

**“OXO”**



Used to attach a rope to a cleat. A round turn “O” followed by an “X” followed by another “O”.

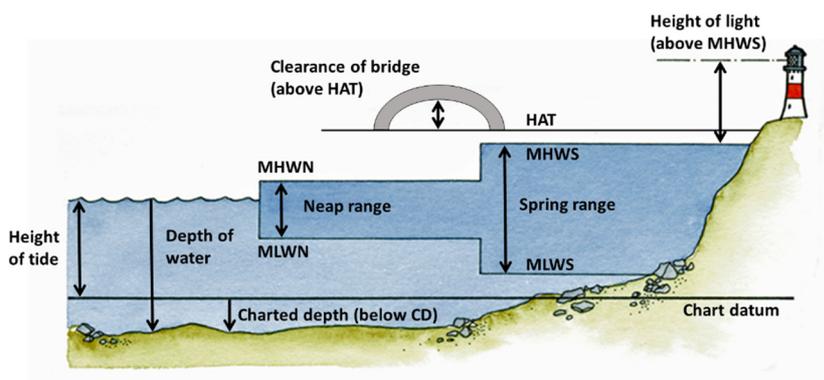
**Coil**



A neat way to store a rope so that it doesn’t turn into spaghetti!

### Tidal Heights

Tidal height information is found in tide tables. It tells you the times and heights of high and low water. The range of tide is the difference between high and low water. All times are given in Universal Time (UT).



**VICTORIA - Standard Port**

TIME ZONE UT  
For Summer Time add ONE hour in non-shaded areas

JANUARY			FEBRUARY			MARCH		
Time	HT	LT	Time	HT	LT	Time	HT	LT
1 0910	0.8	0.8	0208	1.2	1.2	0302	0.3	0.3
1 1126	0.8	0.8	0211	0.8	0.8	0305	0.5	0.5
1 1342	0.7	0.7	0214	0.7	0.7	0308	0.8	0.8
1 2054	0.6	0.6	0217	0.6	0.6	0311	0.9	0.9
2 2056	0.9	0.9	0220	0.5	0.5	0314	1.0	1.0
2 2212	0.8	0.8	0223	0.4	0.4	0317	1.1	1.1
2 2330	0.7	0.7	0226	0.3	0.3	0320	1.2	1.2
3 0043	0.5	0.5	0229	0.2	0.2	0323	1.3	1.3
3 0243	1.0	1.0	0232	0.1	0.1	0326	1.4	1.4
3 0501	0.7	0.7	0235	0.0	0.0	0329	1.5	1.5
3 0719	0.5	0.5	0238	0.0	0.0	0332	1.6	1.6
4 0935	0.3	0.3	0241	0.0	0.0	0335	1.7	1.7
4 1153	0.2	0.2	0244	0.0	0.0	0338	1.8	1.8
4 1413	0.1	0.1	0247	0.0	0.0	0341	1.9	1.9
4 1635	0.0	0.0	0250	0.0	0.0	0344	2.0	2.0
5 1859	0.1	0.1	0253	0.0	0.0	0347	2.1	2.1
5 2125	0.2	0.2	0256	0.0	0.0	0350	2.2	2.2
5 2353	0.3	0.3	0259	0.0	0.0	0353	2.3	2.3
6 0122	0.4	0.4	0302	0.0	0.0	0356	2.4	2.4
6 0352	0.5	0.5	0305	0.0	0.0	0359	2.5	2.5
6 0623	0.6	0.6	0308	0.0	0.0	0402	2.6	2.6
6 0855	0.7	0.7	0311	0.0	0.0	0405	2.7	2.7
6 1128	0.8	0.8	0314	0.0	0.0	0408	2.8	2.8
6 1412	0.9	0.9	0317	0.0	0.0	0411	2.9	2.9
6 1657	1.0	1.0	0320	0.0	0.0	0414	3.0	3.0
6 1953	1.1	1.1	0323	0.0	0.0	0417	3.1	3.1
6 2250	1.2	1.2	0326	0.0	0.0	0420	3.2	3.2
6 2548	1.3	1.3	0329	0.0	0.0	0423	3.3	3.3
6 2847	1.4	1.4	0332	0.0	0.0	0426	3.4	3.4
6 3147	1.5	1.5	0335	0.0	0.0	0429	3.5	3.5
6 3448	1.6	1.6	0338	0.0	0.0	0432	3.6	3.6
6 3750	1.7	1.7	0341	0.0	0.0	0435	3.7	3.7
6 4053	1.8	1.8	0344	0.0	0.0	0438	3.8	3.8
6 4357	1.9	1.9	0347	0.0	0.0	0441	3.9	3.9
6 4662	2.0	2.0	0350	0.0	0.0	0444	4.0	4.0
6 4968	2.1	2.1	0353	0.0	0.0	0447	4.1	4.1
6 5275	2.2	2.2	0356	0.0	0.0	0450	4.2	4.2
6 5583	2.3	2.3	0359	0.0	0.0	0453	4.3	4.3
6 5892	2.4	2.4	0402	0.0	0.0	0456	4.4	4.4
7 0202	2.5	2.5	0405	0.0	0.0	0459	4.5	4.5
7 0513	2.6	2.6	0408	0.0	0.0	0502	4.6	4.6
7 0825	2.7	2.7	0411	0.0	0.0	0505	4.7	4.7
7 1138	2.8	2.8	0414	0.0	0.0	0508	4.8	4.8
7 1452	2.9	2.9	0417	0.0	0.0	0511	4.9	4.9
7 1767	3.0	3.0	0420	0.0	0.0	0514	5.0	5.0
7 2083	3.1	3.1	0423	0.0	0.0	0517	5.1	5.1
7 2400	3.2	3.2	0426	0.0	0.0	0520	5.2	5.2
7 2718	3.3	3.3	0429	0.0	0.0	0523	5.3	5.3
7 3037	3.4	3.4	0432	0.0	0.0	0526	5.4	5.4
7 3357	3.5	3.5	0435	0.0	0.0	0529	5.5	5.5
7 3678	3.6	3.6	0438	0.0	0.0	0532	5.6	5.6
7 4000	3.7	3.7	0441	0.0	0.0	0535	5.7	5.7
7 4323	3.8	3.8	0444	0.0	0.0	0538	5.8	5.8
7 4647	3.9	3.9	0447	0.0	0.0	0541	5.9	5.9
7 4972	4.0	4.0	0450	0.0	0.0	0544	6.0	6.0
7 5298	4.1	4.1	0453	0.0	0.0	0547	6.1	6.1
7 5625	4.2	4.2	0456	0.0	0.0	0550	6.2	6.2
7 5953	4.3	4.3	0459	0.0	0.0	0553	6.3	6.3
8 0282	4.4	4.4	0502	0.0	0.0	0556	6.4	6.4
8 0612	4.5	4.5	0505	0.0	0.0	0559	6.5	6.5
8 0943	4.6	4.6	0508	0.0	0.0	0602	6.6	6.6
8 1275	4.7	4.7	0511	0.0	0.0	0605	6.7	6.7
8 1608	4.8	4.8	0514	0.0	0.0	0608	6.8	6.8
8 1942	4.9	4.9	0517	0.0	0.0	0611	6.9	6.9
8 2277	5.0	5.0	0520	0.0	0.0	0614	7.0	7.0
8 2613	5.1	5.1	0523	0.0	0.0	0617	7.1	7.1
8 2950	5.2	5.2	0526	0.0	0.0	0620	7.2	7.2
8 3328	5.3	5.3	0529	0.0	0.0	0623	7.3	7.3
8 3667	5.4	5.4	0532	0.0	0.0	0626	7.4	7.4
8 4007	5.5	5.5	0535	0.0	0.0	0629	7.5	7.5
8 4348	5.6	5.6	0538	0.0	0.0	0632	7.6	7.6
8 4690	5.7	5.7	0541	0.0	0.0	0635	7.7	7.7
8 5033	5.8	5.8	0544	0.0	0.0	0638	7.8	7.8
8 5377	5.9	5.9	0547	0.0	0.0	0641	7.9	7.9
8 5722	6.0	6.0	0550	0.0	0.0	0644	8.0	8.0
8 6068	6.1	6.1	0553	0.0	0.0	0647	8.1	8.1
8 6415	6.2	6.2	0556	0.0	0.0	0650	8.2	8.2
8 6763	6.3	6.3	0559	0.0	0.0	0653	8.3	8.3
8 7112	6.4	6.4	0602	0.0	0.0	0656	8.4	8.4
8 7462	6.5	6.5	0605	0.0	0.0	0659	8.5	8.5
8 7813	6.6	6.6	0608	0.0	0.0	0702	8.6	8.6
8 8165	6.7	6.7	0611	0.0	0.0	0705	8.7	8.7
8 8518	6.8	6.8	0614	0.0	0.0	0708	8.8	8.8
8 8872	6.9	6.9	0617	0.0	0.0	0711	8.9	8.9
8 9227	7.0	7.0	0620	0.0	0.0	0714	9.0	9.0
8 9583	7.1	7.1	0623	0.0	0.0	0717	9.1	9.1
9 0040	7.2	7.2	0626	0.0	0.0	0720	9.2	9.2
9 0498	7.3	7.3	0629	0.0	0.0	0723	9.3	9.3
9 0957	7.4	7.4	0632	0.0	0.0	0726	9.4	9.4
9 1417	7.5	7.5	0635	0.0	0.0	0729	9.5	9.5
9 1878	7.6	7.6	0638	0.0	0.0	0732	9.6	9.6
9 2340	7.7	7.7	0641	0.0	0.0	0735	9.7	9.7
9 2803	7.8	7.8	0644	0.0	0.0	0738	9.8	9.8
9 3267	7.9	7.9	0647	0.0	0.0	0741	9.9	9.9
9 3732	8.0	8.0	0650	0.0	0.0	0744	10.0	10.0

**Range of Tide is 4.5 metres. HW 5.5m – LW 1.0m**

### Tidal Streams

Tidal stream data can be found on charts in the form of **Tidal Diamonds** (below, left) or in **Tidal Stream Atlases** (below, right).

Hours	A 50 42'.3N 0 26'.5E			B 50 53'.0N 1 00'.0E			C 51 01'.0N 1 10'.0E		
	Dir	Sp	Np	Dir	Sp	Np	Dir	Sp	Np
Before HW									
6	248	0.8	0	248	0.9	0	224	0.9	0.5
5	067	0.5	0	067	0.5	0	239	1.0	0.6
4	068	1.9	1	068	1.9	1	235	1.1	0.6
3	071	2.6	1	071	2.6	1	235	0.6	0.4
2	069	2.3	1	069	2.3	1	052	0.6	0.3
1	068	1.2	0.6	033	0.8	0.5	052	0.6	0.3
HW	067	0.1	0.1	032	1.5	0.8	049	1.2	0.7
After HW									
1	248	0.9	0	248	0.9	0	056	1.3	0.7
2	247	1.4	0	247	1.4	0	056	1.0	0.5
3	251	1.8	0	251	1.8	0	054	0.5	0.3
4	253	1.7	0	253	1.7	0	054	0.5	0.3
5	250	1.6	0.9	211	0.4	0.2	219	0.4	0.2
6	249	1.2	0.7	212	1.3	0.7	217	0.8	0.4

The arrow indicates the direction in which the tide is flowing

Tidal hour relative to the time of High Water

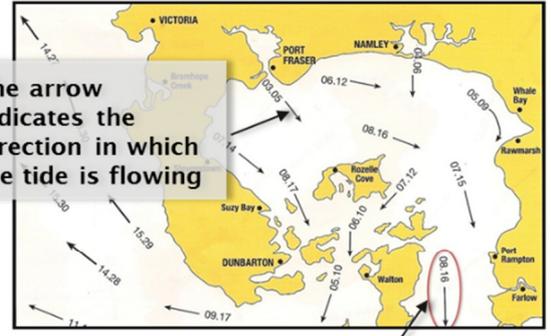
Speed of the tide at Springs in knots

Speed of the tide at Neaps in knots

Tidal hour relative to the time of High Water

2 hours after HW VICTORIA

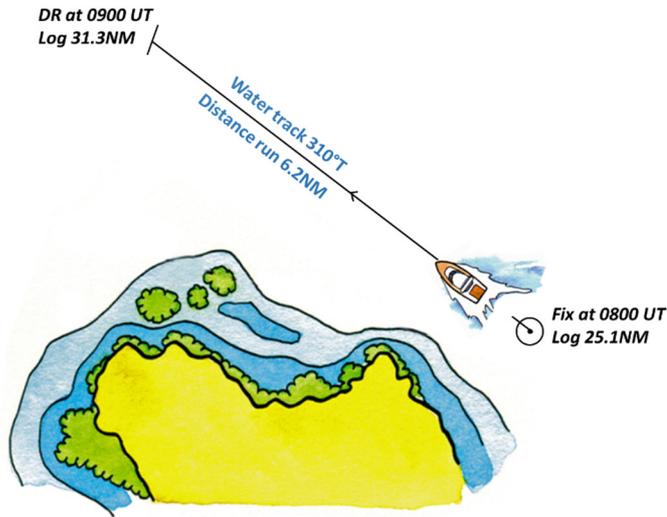
The arrow indicates the direction in which the tide is flowing



Speed with which the tide is flowing - the larger number is the speed if its a spring tide and the smaller number is the speed if it's a neaps tide. The highlighted numbers - 08.16 - means 0.8knots during neaps and 1.6 knots on springs.

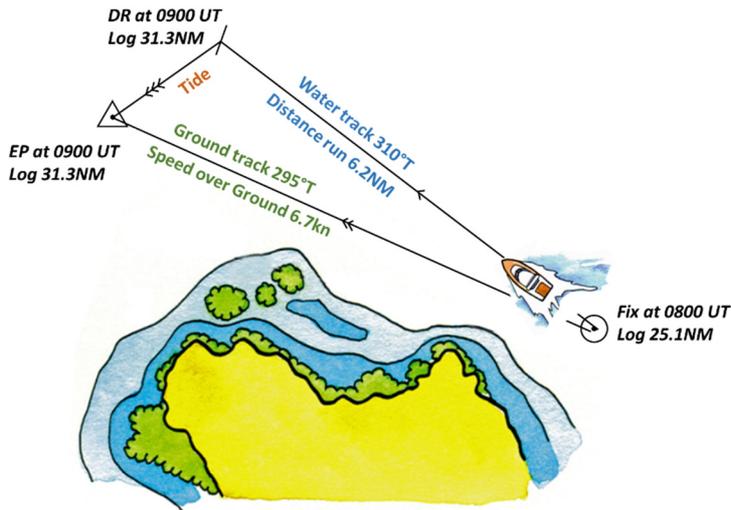
**Dead Reckoning (DR)**

A DR is deduced from the course steered on the compass and the distance run taken from the log



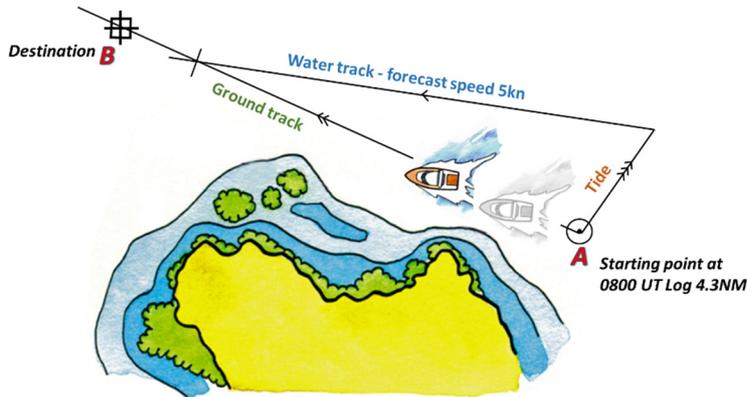
**Estimated Position (EP)**

An EP adds the effect of tide and possibly wind to make the position fix more accurate

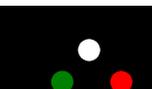
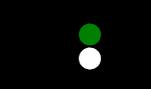
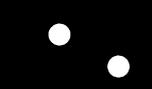
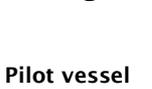
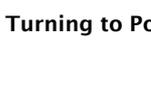
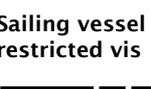
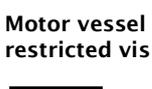
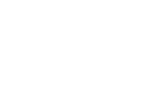
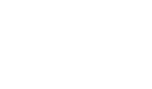
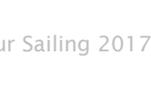
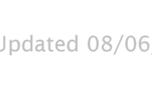


**Course-to-Steer (CTS)**

A course-to-steer is prepared so that the boat is subsequently steered to take the effects of the tide into account



**Buoyage (IALA A) and International Regulations for the Prevention of Collisions at Sea (IRPCS)**  
 Revise the buoyage system, the lights, shapes, sound signals and Rules of the Road from the IRPCS

<p><b>Port Mark</b></p>  <p>Red, flashes any rhythm except 2+1</p>	<p><b>Starboard Mark</b></p>  <p>Green, flashes any rhythm except 2+1</p>	<p><b>Preferred Channel to Starboard Mark</b></p>  <p>Red, 2+1 flashes</p>	<p><b>Preferred Channel to Port Mark</b></p>  <p>Green, 2+1 flashes</p>	<p><b>New wreck Mark</b></p>  <p>Alternate blue and yellow flashes</p>	<p><b>Isolated Danger Mark</b></p>  <p>2 white flashes</p>
<p><b>Safewater Mark</b></p>  <p>Morse A, occulting, isophase or 1 flash (10 sec)</p>	<p><b>Special Mark</b></p>  <p>Yellow, flashes any rhythm</p>	<p><b>North Cardinal Mark</b></p>  <p>White, continuous flashes</p>	<p><b>East Cardinal Mark</b></p>  <p>White, 3 flashes</p>	<p><b>South Cardinal Mark</b></p>  <p>White, 6 short + 1 long flashes</p>	<p><b>West Cardinal Mark</b></p>  <p>White, 9 flashes</p>
<p><b>Motor vessel under 50m</b></p> 	<p><b>Motor vessel probably over 50m</b></p> 	<p><b>Sailing vessel</b></p> 	<p><b>Sailing vessel Tricolour</b></p> 	<p><b>Pilot vessel</b></p> 	<p><b>Vessel in non-displacement mode</b></p> 
<p><b>Fishing vessel</b></p> 	<p><b>Trawler</b></p> 	<p><b>At anchor under 50m</b></p> 	<p><b>At anchor over 50m</b></p> 	<p><b>Restricted Ability to Manoeuvre</b></p> 	<p><b>Engaged in underwater operations</b></p> 
<p><b>Not Under Command</b></p> 	<p><b>Constrained By Draught</b></p> 	<p><b>Tow under 200m</b></p> 	<p><b>Tow over 200m</b></p> 	<p><b>Aground</b></p> 	<p><b>Minesweeper</b></p> 
<p><b>Motorsailing</b></p> 	<p><b>At Anchor</b></p> 	<p><b>Restricted Ability to Manoeuvre</b></p> 	<p><b>Engaged in Underwater Operations</b></p> 	<p><b>Fishing or Trawling</b></p> 	<p><b>Constrained By Draught</b></p> 
<p><b>Tow</b></p> 	<p><b>Not Under Command</b></p> 	<p><b>Aground</b></p> 	<p><b>Minesweeper</b></p> 	<p><b>Divers down</b></p> 	<p><b>Pilot vessel</b></p> 
<p><b>Turning to Starboard</b></p> 	<p><b>Turning to Port</b></p> 	<p><b>Engines Astern</b></p> 	<p><b>Unsure of Your Intentions</b></p> 	<p><b>Sailing vessel in restricted vis</b></p> 	<p><b>Motor vessel in restricted vis</b></p> 
<p><b>Starboard v. port tack</b></p> 	<p><b>Windward vessel</b></p> 	<p><b>Motor boats head-on</b></p> 	<p><b>Motor boats crossing</b></p> 	<p><b>Sail v. power</b></p> 	<p><b>Overtaking</b></p> 

## IRPCS Summarised

This is a summarised overview of the IRPCS you need to know at Day Skipper level.

- The rules apply anywhere on the sea or 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

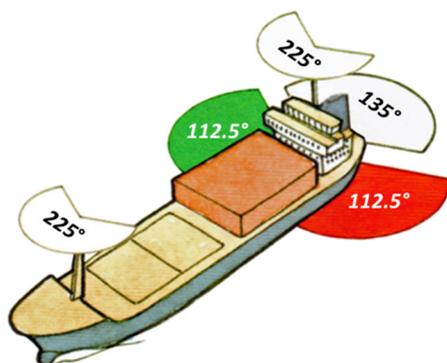
- Not under Command (NUC)
- Restricted in Ability to Manoeuvre (RAM) Constrained by draught (CDB)
- Fishing
- Sailing
- Power

## 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 and 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.

## Arc of Visibility

The arc of visibility of vessel lights:



## Day Skipper Practical Checklist

Do I know how to:

- Tie knots
- Plot position using Latitude and Longitude
- Plot position using bearings and distance
- Convert from True North to Magnetic and Compass factoring in Variation and Deviation
- Calculate tidal heights
- Calculate tidal streams
- Calculate an Estimated Position and Course To Steer
- Prepare a pilotage plan
- Prepare a passage plan
- Know the buoys of the buoyage system
- Understand the IRPCS and the lights on vessels