**ENDEAVOUR** SAILING

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.

PRE-COURSE READING: DAY SKIPPER COMBINED COURSE
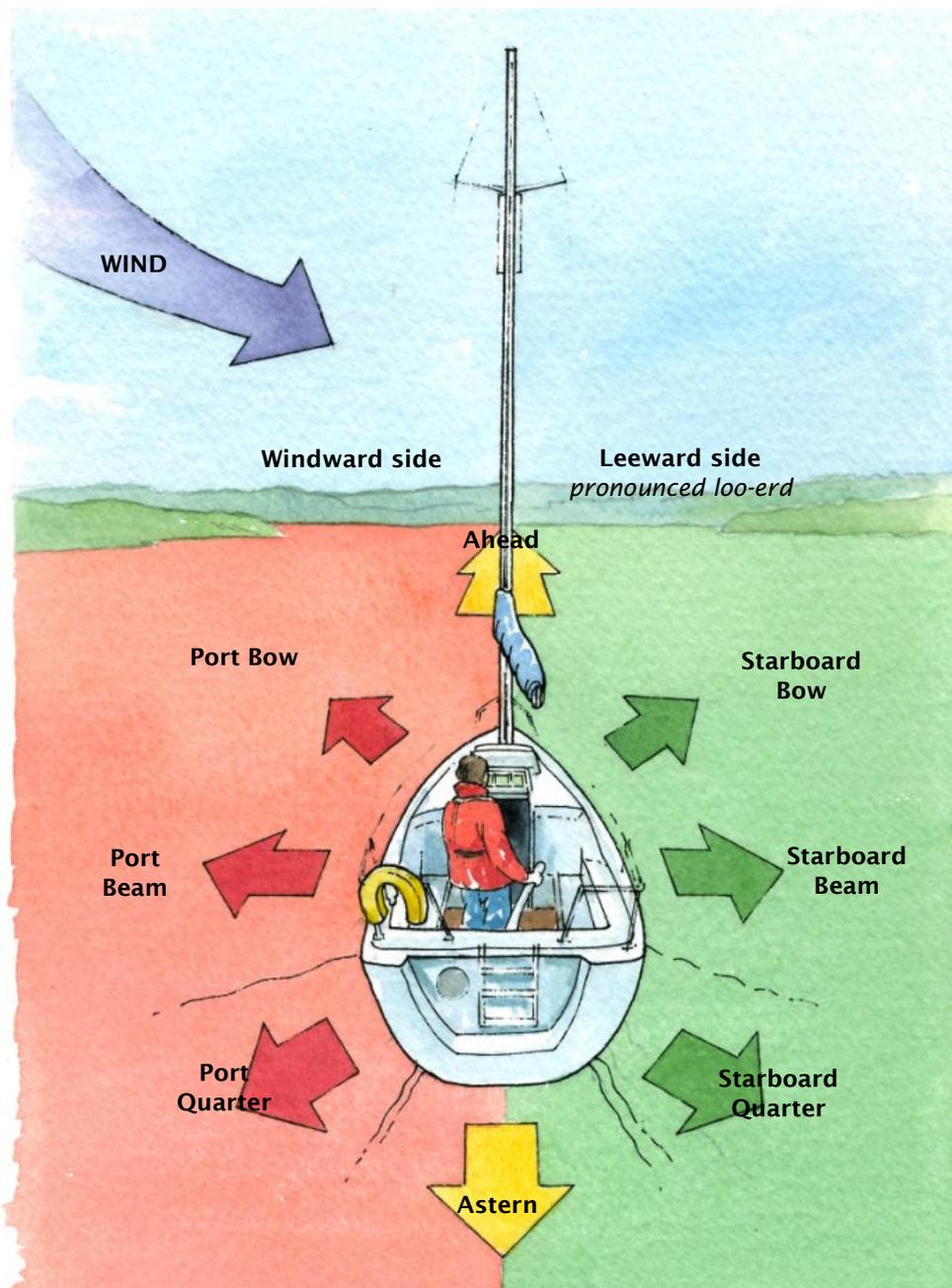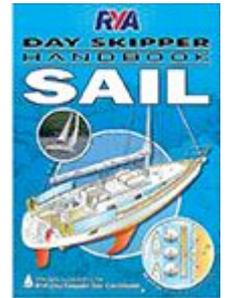
ENDEAVOUR
SAILING

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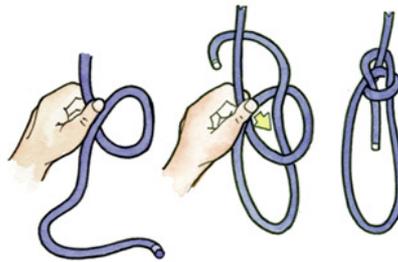
Very secure knot but cannot be untied if under tension. Used for mooring lines

Clove Hitch
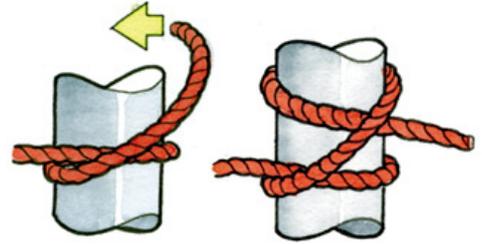
Can be easily adjusted and is ideal for securing fenders

Figure of Eight
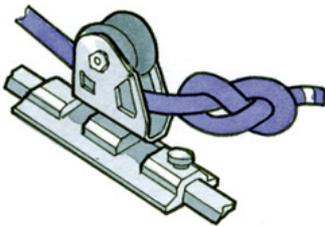
Acts as a stopper knot to prevent a rope from escaping

Double & Single sheet bends
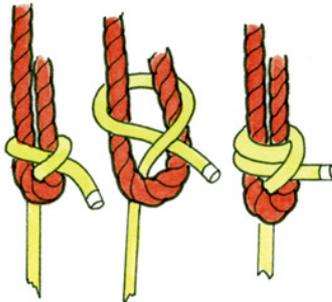
Used to join two ropes of different thicknesses

Rolling Hitch

Ideal for taking the strain off another rope

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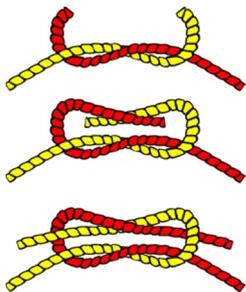
Used to join ropes of equal thickness together or to tie up a sail

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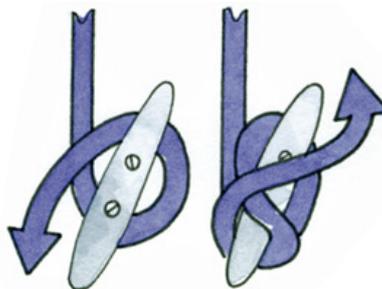
Used to attach a rope to a cleat. A round turn "O" followed by an "X" followed by another "O".

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).

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).

PRE-COURSE READING: DAY SKIPPER COMBINED COURSE

Dead Reckoning (DR)

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

DR at 0900 UT
Log 31.3NM

Water track 310°T
Distance run 6.2NM

Fix at 0800 UT
Log 25.1NM
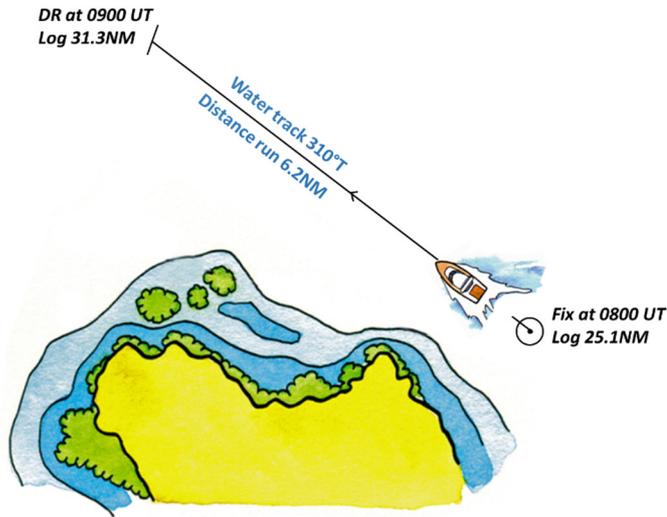
Estimated Position (EP)

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

DR at 0900 UT
Log 31.3NM

Tide

Water track 310°T
Distance run 6.2NM

EP at 0900 UT
Log 31.3NM

Ground track 295°T
Speed over Ground 6.7kn

Fix at 0800 UT
Log 25.1NM
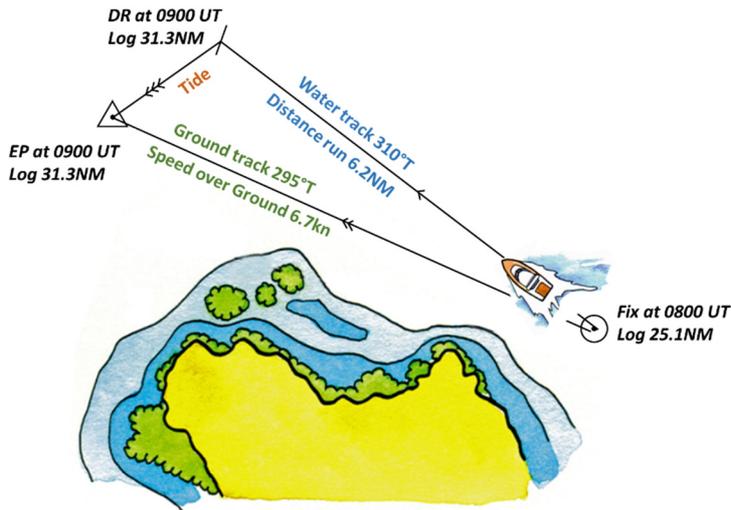
Course-to-Steer (CTS)

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

Destination B

Water track - forecast speed 5kn

Ground track

Tide

A Starting point at
0800 UT Log 4.3NM
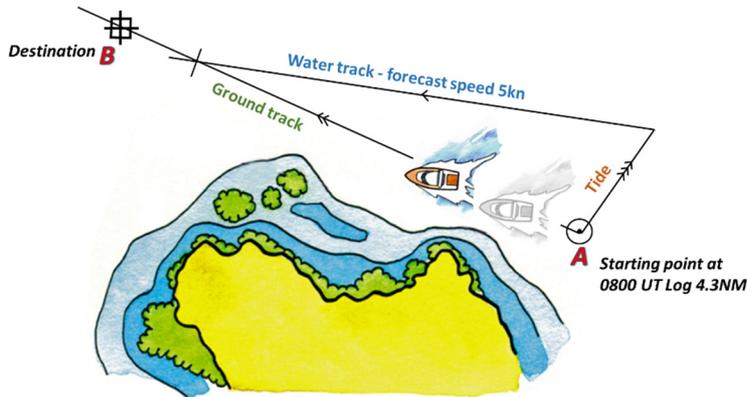
Buoyage (IALA A) and International Regulations for the Prevention of Collisions at Sea (IRPCS)
Revise the buoyage system, the lights, shapes, sound signals and Rules of the Road from the IRPCS

Port Mark	Starboard Mark	Preferred Channel to Starboard Mark	Preferred Channel to Port Mark	New wreck Mark	Isolated Danger Mark
Red, flashes any rhythm except 2+1	Green, flashes any rhythm except 2+1	Red, 2+1 flashes	Green, 2+1 flashes	Alternate blue and yellow flashes	2 white flashes

Safewater Mark	Special Mark	North Cardinal Mark	East Cardinal Mark	South Cardinal Mark	West Cardinal Mark
Morse A, occulting, isophase or 1 flash (10 sec)	Yellow, flashes any rhythm	White, continuous flashes	White, 3 flashes	White, 6 short + 1 long flashes	White, 9 flashes

Motor vessel under 50m	Motor vessel probably over 50m	Sailing vessel	Sailing vessel Tricolour	Pilot vessel	Vessel in non-displacement mode
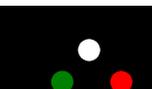
Fishing vessel	Trawler	At anchor under 50m	At anchor over 50m	Restricted Ability to Manoeuvre	Engaged in underwater operations
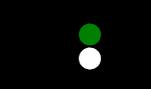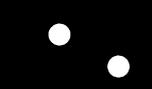
Not Under Command	Constrained By Draught	Tow under 200m	Tow over 200m	Aground	Minesweeper

Motorsailing	At Anchor	Restricted Ability to Manoeuvre	Engaged in Underwater Operations	Fishing or Trawling	Constrained By Draught
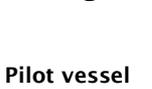
Tow	Not Under Command	Aground	Minesweeper	Divers down	Pilot vessel
				1m high	
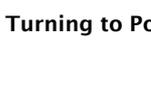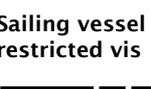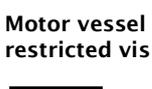
Turning to Starboard	Turning to Port	Engines Astern	Unsure of Your Intentions	Sailing vessel in restricted vis	Motor vessel in restricted vis
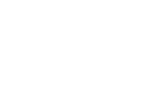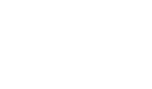
Starboard v. port tack	Windward vessel	Motor boats head-on	Motor boats crossing	Sail v. power	Overtaking
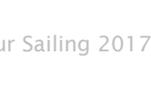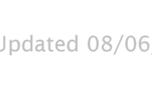
IRPCS Summarised
This is a summarised overview of the IRPCS you need to know at Day Skipper level.

- 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:
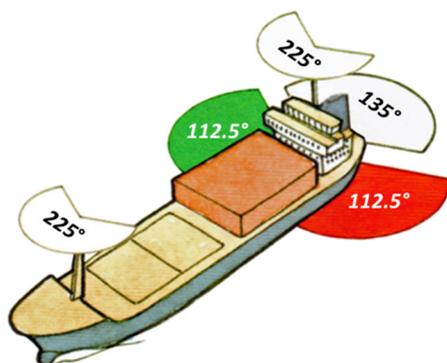
Day Skipper Practical Checklist
Do I know how to:

- 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