

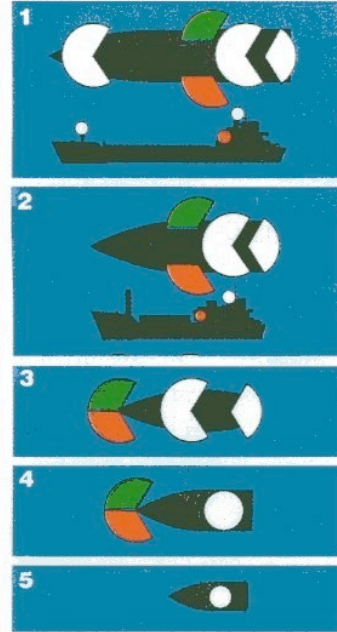
HAVE YOU DONE YOUR HOMEWORK?

NAVIGATION LIGHTS

- A. Side lights show through an arc of...?
- B. Masthead lights show through an arc of...?
- C. Stern lights show through an arc of...?

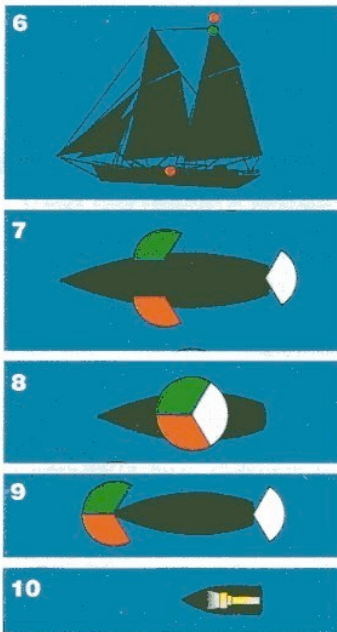
▼ Power driven vessels

What boats show these lights?



▼ Sailing vessels

What boats show these lights?



11. If using both sails and engine what lights do you show?

ALL-ROUND IDENTIFICATION LIGHTS: Can you tell the difference?

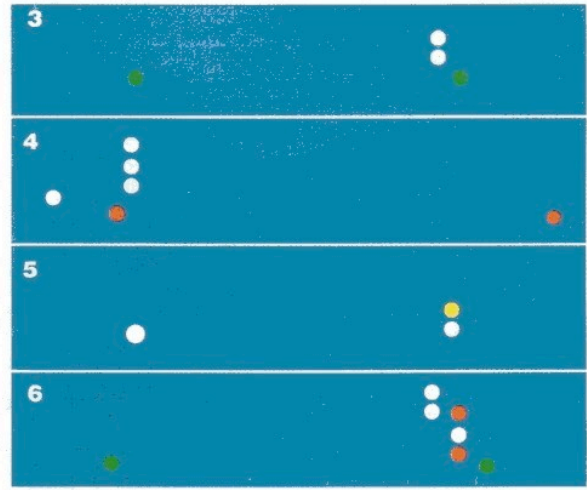


9. Which ones switch off their nav. lights when stopped?

LIGHTS FOR TUGS AND TOWS

As well as showing the nav. lights for a vessel of its size, a tug has extra masthead lights to indicate the length of tow and, when towing astern, a yellow towing light above the stern light. These lights aren't all-round but cover the same arcs as the steaming and stern lights respectively.

What do these indicate?



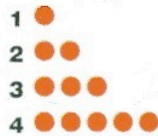
ANCHOR LIGHTS



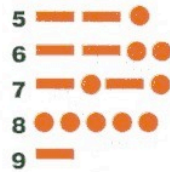
SOUND SIGNALS: What do they mean?

VESSELS IN SIGHT OF EACH OTHER

Manoeuvring and warning signals:

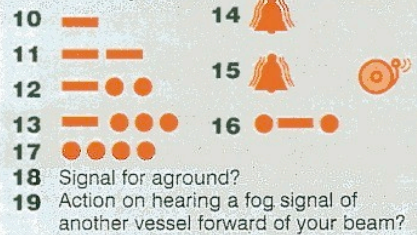


In narrow channels:



IN RESTRICTED VISIBILITY

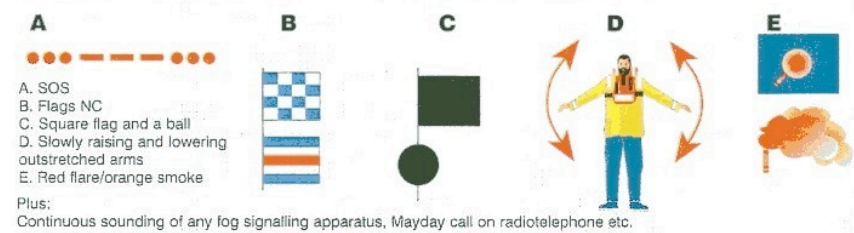
At least every 2 mins.



DAY SHAPES: Which one is which?



DISTRESS SIGNALS: Just a few you should recognise:



THIS PAGE COVERS THE COLLISION REGULATIONS (colregs) AND HAS THE ANSWERS TO THE COLOURED SHEET OF QUESTIONS

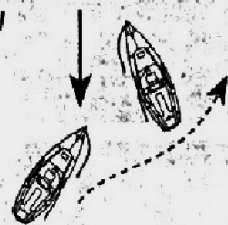
GENERAL: The "colregs" apply to all vessels on the high seas and on all waters connected therewith which are navigable by seagoing vessels and includes harbours and marinas but harbour by-laws may take precedence. Excludes land-locked lakes.

STEERING AND SAILING RULES: **Look-out:** Every vessel, at all times, must keep a look-out by all available means (sight, hearing, radar if appropriate) **Safe speed:** Consider visibility, traffic density, manoeuvrability, background lights and backscatter, wind, sea state, current, hazards and depth. **Determining risk of collision:** Use all available and appropriate means including taking a series of compass bearings. If bearing remains fairly constant a risk of collision is deemed to exist. **Action to avoid collision:** Make early and substantial alteration to avoid collision. Avoid small alterations and make alteration clear to the other vessel. At night alter sufficiently for other vessel to see different light. Can slow or stop. Continue to monitor until finally past and clear. **Narrow channels:** Keep as near to the outer limit of the starboard side as is safe and practicable. The rules don't oblige you to stay inside the channel. Avoid anchoring. **Traffic Separation Schemes:** If using the scheme use the correct lane and proceed with the flow of traffic. Join or leave at the ends or if coming in at the side, at a small angle. Avoid crossing but if you must cross your heading must be at right angles to the traffic flow. Power driven vessels <20m and vessels under sail must not impede the passage of power driven vessels following a lane. Avoid anchoring. **Which Tack?:** Named opposite to where the main boom is or would be. If in doubt, give way. **Action by Give Way vessel:** Take early and substantial action to keep well clear. **Action by Stand On vessel:** Maintain course and speed and continue to monitor. May take action if give way vessel does not take appropriate action. Must take action if so close that collision cannot be avoided by action of the give way vessel alone. NB if you have stood on in a crossing situation between two power driven vessels but then need to take avoiding action, don't go to port for a vessel on your own port side. **Responsibilities between vessels:** Power driven vessels give way to - NUC, RAM, Fishing, Sailing. Sailing vessel under sail give way to - NUC, RAM, Fishing. Note all vessels must avoid impeding the safe passage of a vessel constrained by her draught.

▼ TWO VESSELS MEETING SO AS TO INVOLVE RISK OF COLLISION

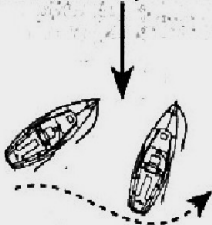
1. Power gives way to sail (with certain exceptions).

For sail boats:

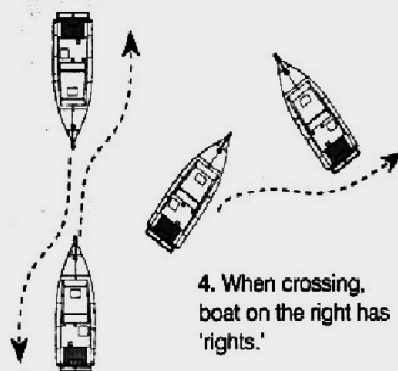


2. Port tack gives way to starboard.

3. Windward boat keeps clear.



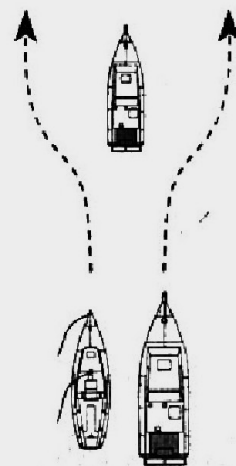
For power boats:



5. When head-on, pass port to port.

For any vessel:

6. Overtaking boat keeps clear.



HOW DID YOU GET ON?

Navigation lights: A. 112.5deg from ahead to 22.5deg abaft the beam. B. 225deg. From 22.5deg abaft the beam on both sides. C. 135deg from 22.5deg abaft the beam on each side. **Power Driven Vessels:** 1. <50m voluntary or >50m mandatory. 2. 20-50m 3. <20m. 4. <12m. 5. <7m with max speed <7kts.

Sailing Vessels: 6. Additional all round lights but not when using a tricolour 7. >20m. 8. <20m (masthead tricolour normally fitted to modern auxiliary sailing yachts). 9. <20m. 10. <7m or under oars - shine torch when necessary. 11. Lights for a power driven vessel.

Identification lights: 1. NUC (NUC + anchor lights = aground) 2. Constrained 3. RAM 4. Minesweeper 5. Dredger (red obstructed/green OK to pass) 6. Fishing (not trawling) 7. Fishing (trawling) 8. Pilot vessel 9. Fishing, NUC, RAM.

Lights for Tugs and Tows: 1. Two masthead lights = length of tow <200m 2. Three masthead lights = length of tow >200m

3. PDV underway <50m towing where tow is <200m starboard aspect. 4. PDV underway >50m towing where tow is >200m port aspect. 5. PDV towing another vessel viewed from astern NB No yellow lights if towing alongside or pushing. If the tow is particularly onerous and restricts the tug's ability to manoeuvre the tug will show RAM lights. 6. PDV underway <50m towing where tow is <200m. Starboard aspect.

Anchor lights: (all round white lights) 1. <50m 2. <100m 3. >100m deck lights as well. NB Anchor lights + NUC = aground

Sound Signals: 1. Altering course to starboard. 2. Altering course to Port. 3. Operating astern propulsion. 4. I fail to understand your intentions or I doubt you are taking sufficient avoiding action. 5. I intend to overtake you on your starboard side. 6. I intend to overtake you on your port side. 7. I agree to being overtaken. 8. Do not overtake as suggested. 9. Warning and answer signal when approaching a blind bend. (if in restricted visibility) 10. PDV making way. 11. PDV underway but stopped. 12. All hampered vessels (sailing, RAM, constrained, NUC, fishing, tugs). 13. Towed vessel (or last in a line of towed vessels). 14. <100m (bell rung for 5secs - 1min). 15. >100m (bell in bow for 5 sec then gong in stern for 5sec - 1min). 16. If OOW determines risk of collision whilst at anchor. 17. Pilot vessel on duty. 18. Appropriate anchor signal + 3 distinct strokes of bell (or gong) before and after 5sec ringing. 19. If you hear the fog signal of another vessel forward of your beam, apart from sounding your own fog signal you should:- reduce speed to steerageway, stop if necessary, navigate with extreme caution until danger of collision is over.

Day shapes: 1. Motorsailing cone. 2. Anchor ball. 3. NUC. 4. Aground. 5. Constrained. 6. RAM. 7. Dredger (balls = obstructed / diamonds = OK to pass). 8. Fishing/trawling. 9. Minesweeping. 10. Tug followed by tow (if tow >200m). 11. I have a diver down - keep well clear at low speed.

Terms and Key: Underway = not anchored, made fast to shore or aground. Making way = proceeding through the water. Stopped = not making way through the water. PDV = power driven vessel. NUC = not under command. Constrained = constrained by draught. RAM = restricted in ability to manoeuvre. OOW = officer of the watch.

VERY IMPORTANT

You will be expected to know the identifying lights vessels show at night, the identifying shapes they show by day, the identifying sound signals they sound in restricted visibility (fog) and the maneuvering sound signals they sound when in sight of one another (not in fog). Maneuvering signals are not sounded in fog.

NB You will not pass a Yachtmaster Exam if you do not know the information shown on these two pages.