

Colregs

MSE Pocket Book



Witherby Seamanship International

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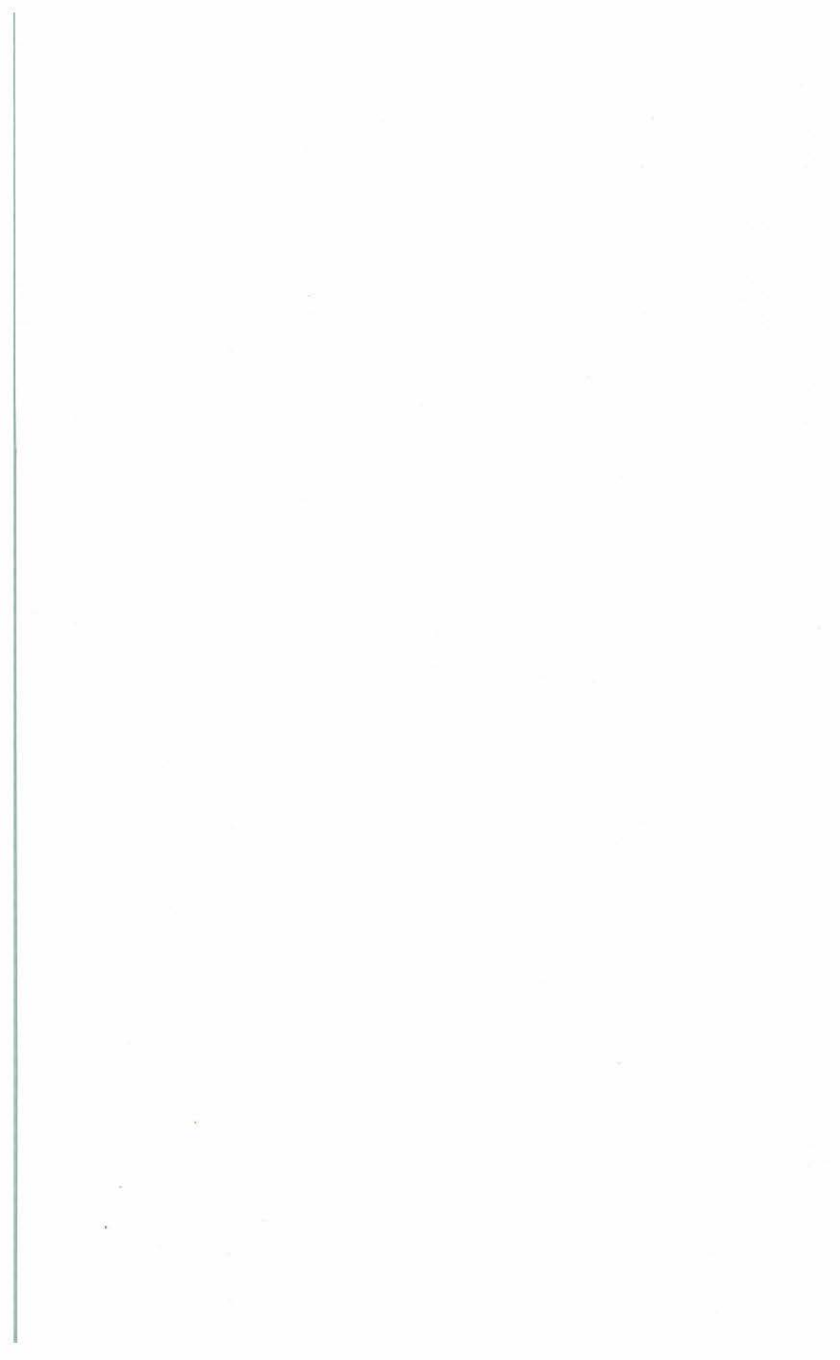
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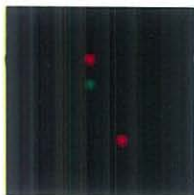
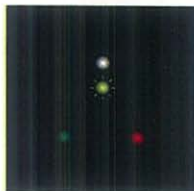
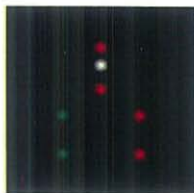
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QUESTIONS

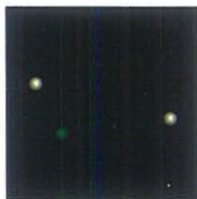


1 Navigation Lights

- 1.1** 1) What type of vessel would exhibit the lights shown?
2) What sound signal would she make in restricted visibility?
3) What daylight signals would the vessel show?
- 1.2** What type of vessel would exhibit the lights illustrated and what sound signal would she make in restricted visibility?
- 1.3** 1) What type of vessel would exhibit the lights shown and what sound signal would she give in restricted visibility?
2) What frequency would the flashing light flash at?
- 1.4** What type of vessel would show the following lights and what sound signal in restricted visibility would she make?
- 1.5** What type of vessel, or vessels would show these lights and what sound signals would you expect to hear in restricted visibility?



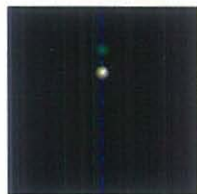
- 1.6** What type of vessel could show the following lights?



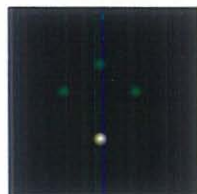
- 1.7** What type of vessel or vessel could show these lights and what sound signal would they make?



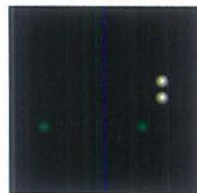
- 1.8** What type of vessel could show these lights and what sound signal would she make?



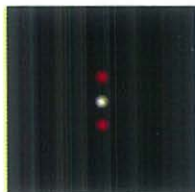
- 1.9** What type of vessel would show these lights?



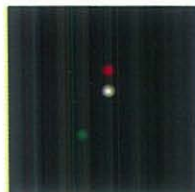
- 1.10** What type of vessel or vessels would show these lights and what sound signals would you expect to hear in restricted visibility?



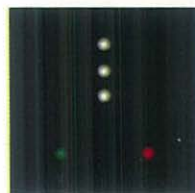
- 1.11** What type of vessel would show these lights?



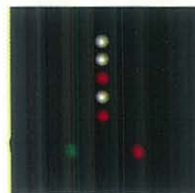
- 1.12** What type of vessel would show these lights and what sound signal in restricted visibility would she sound?



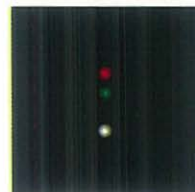
- 1.13** What type of vessel or vessels would show these lights?



- 1.14** What type of vessel could show these lights?



- 1.15** What type of vessel would show these lights?



- 1.16** What type of vessel would show these lights?



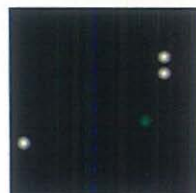
- 1.17** What type of vessel could show these lights?



- 1.18** What type of vessel would show these lights?

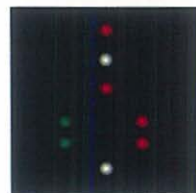


- 1.19** What type of vessel or vessels would show these lights?

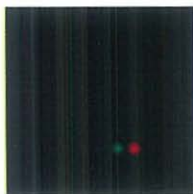


- 1.20** What type of vessel would show these lights?

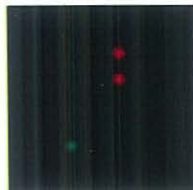
Which side is safe to pass?



- 1.21** What type of vessel would show these lights?



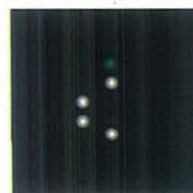
- 1.22** What type of vessel would show these lights?
What day signal would you expect to see?



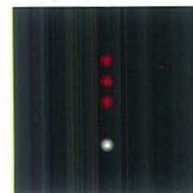
- 1.23** What type of vessel or vessels would show these (non-flashing) lights.



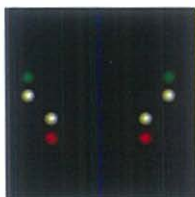
- 1.24** What type of vessel would show these lights?



- 1.25** What type of vessel would show these lights?
What day signal would you expect to see?

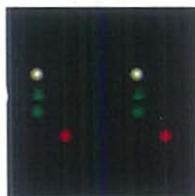


- 1.26** What type of vessels would show these lights?



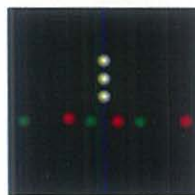
- 1.27** What type of vessel or vessels could these lights show?

What distance do these lights indicate it is not safe to approach within and what is the range of the all-round green lights?

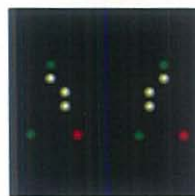


- 1.28** What type of vessel or vessels could show these lights?

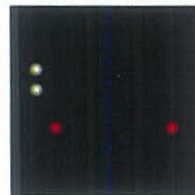
On such a vessel, what minimum ranges should the masthead lights and sidelights be visible at?



- 1.29**
- 1) What type of vessel or vessels would show these lights and what sound signal would you expect to hear in restricted visibility?
 - 2) In addition to the lights shown, what other lights may be exhibited?



- 1.30**
- 1) What type of vessel or vessels would show these lights.
 - 2) What visible range or ranges could you expect to sight the masthead light on the vessel?



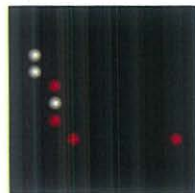
- 1.31** What vessel or vessels would be expected to show these lights?



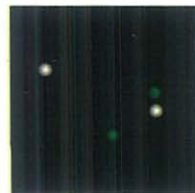
- 1.32** What type of vessel would show this light?
What additional light signal could this vessel exhibit?



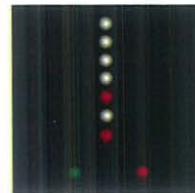
- 1.33** What type of vessel or vessels would show these lights?



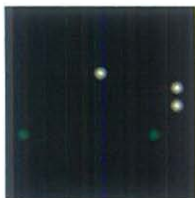
- 1.34** 1) What type of vessel may show these lights?
2) If the vessel was to come to a stop, ie cease making way through the water, what change (if any) would she make to her lights?



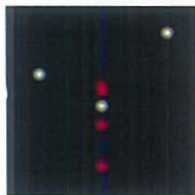
- 1.35** 1) What type of vessel may show these lights?
2) At what minimum visible range would you expect to see the red/white/red all round lights?



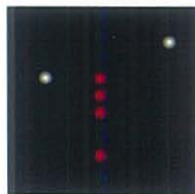
- 1.36** 1) What type of vessel or vessels would show these lights?
2) How is the length measured?



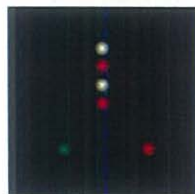
- 1.37** 1) What type of vessel or vessel would show these lights?
2) According to the rules, which vessels can exhibit these lights?



- 1.38** 1) What type of vessel would show these lights?
2) Define such vessel according to the rules.



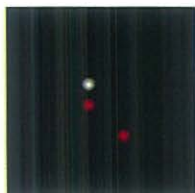
- 1.39** What type of vessel would display these lights?



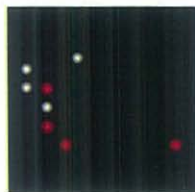
- 1.40** What type of vessel do these lights represent?



- 1.41** 1) What type of vessel would show these lights?
2) What length is the vessel?



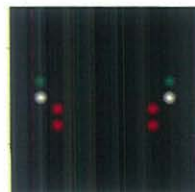
- 1.42** What type of vessel or vessels would show these lights?



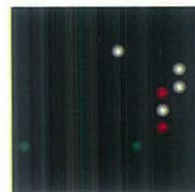
- 1.43** 1) What type of vessel or vessels would show these lights?
2) What is the minimum visible range for the sidelights on the vessel?



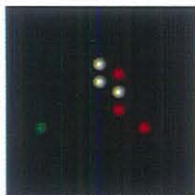
- 1.44** What type of vessels would show these lights?



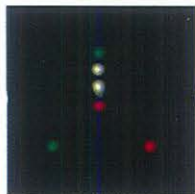
- 1.45** What type of vessel or vessels would show these lights?



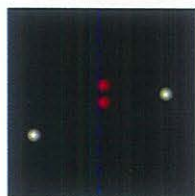
1.46 What type of vessel could show these lights?



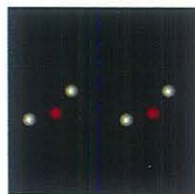
1.47 What type of vessel would show these lights?



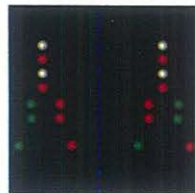
1.48 1) What type of vessel could show these lights?
2) What sound signal would you expect to hear in restricted visibility if more than 100 metres in length?



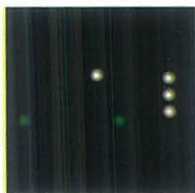
1.49 What type of vessel or vessels could show these lights?



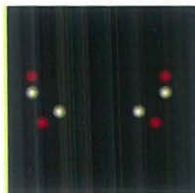
1.50 What type of vessel or vessels would show these lights?



- 1.51** What type of vessel or vessels would show these lights?



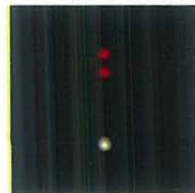
- 1.52** 1) What type of vessel or vessels would show these lights?
2) By day what additional signal would use the vessel(s)?



- 1.53** What type of vessel would show this light?



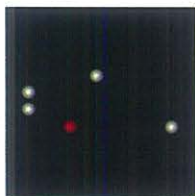
- 1.54** What type of vessel could show these lights?



- 1.55** What type of vessel would show these lights?



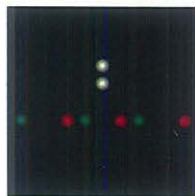
1.56 What type of vessel would exhibit these lights?



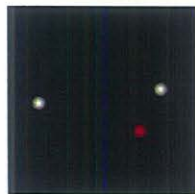
1.57 1) What type of vessel is shown by these lights?
 2) If own ship is on course 000° (T), what possible headings could the vessel be on?



1.58 What type of vessel or vessels would show these lights?



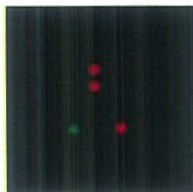
1.59 1) What type of vessel would show these lights?
 2) At what height is the after masthead light carried above the foremast light?



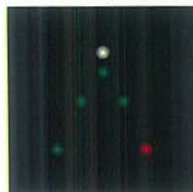
1.60 What type of vessel could show these lights?



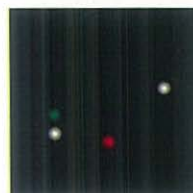
- 1.61** 1) What type of vessel would show these lights?
2) Is there any there indication of length and, if so, what is it?



- 1.62** What type of vessel would show these lights?



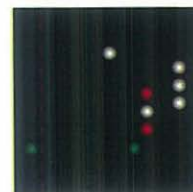
- 1.63** 1) What type of vessel would show these lights?
2) What additional light signals may this vessel exhibit?



- 1.64** 1) What type of vessel or vessels would show these lights?
2) What arc is the yellow light visible through?



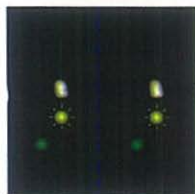
- 1.65** What type of vessel would show these lights?



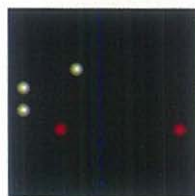
- 1.66** What type of vessel would show these lights?



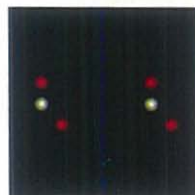
- 1.67** What type of vessel or vessels would show these lights?



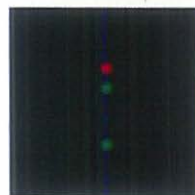
- 1.68** What type of vessel or vessels would show these lights?



- 1.69** What type of vessel or vessels would show these lights?



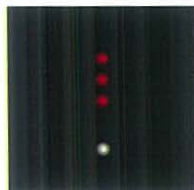
- 1.70** What type of vessel would show these lights?



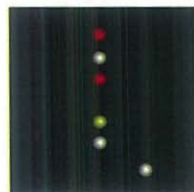
1.71 What type of vessel would show these lights?



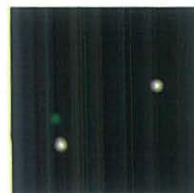
1.72 1) What type of vessel would show these lights?
2) What daylight signal would the vessel show?



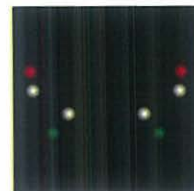
1.73 What type of vessel would show these lights?



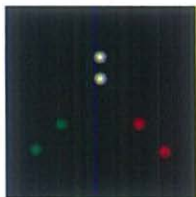
1.74 What type of vessel would show these lights?



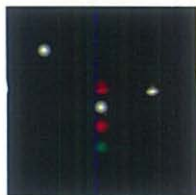
1.75 What type of vessel or vessels would show these lights?



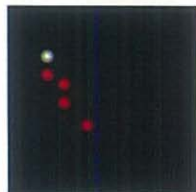
1.76 What type of vessel or vessels would show these lights?



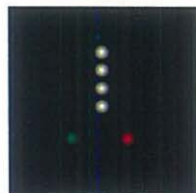
1.77 1) What type of vessel would show these lights?
2) Define such vessel according to the rules.



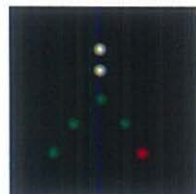
1.78 What type of vessel would show these lights?



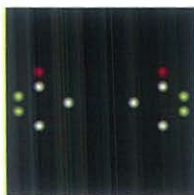
1.79 What type of vessel could show these lights?



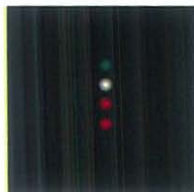
1.80 1) What type of vessel would show these lights?
2) What do the additional lights indicate?



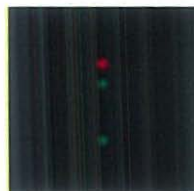
- 1.81** What type of vessels would show these lights (the yellow lights flash alternately)?



- 1.82** What type of vessel would show these lights?



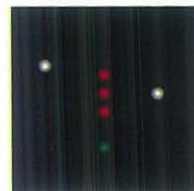
- 1.83** What type of vessel would show these lights?



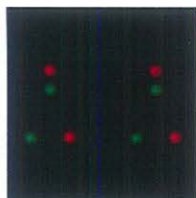
- 1.84** What type of vessel would show these lights?



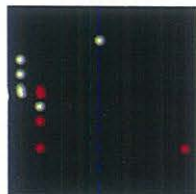
- 1.85**
- 1) What type of vessel would show these lights?
 - 2) Define such vessel according to the rules.



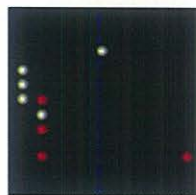
1.86 What type of vessels would show these lights?



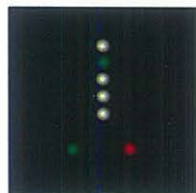
1.87 What type of vessel would show these lights?



1.88 What type of vessel would show these lights?



1.89 What type of vessel would show these lights?



1.90 What type of vessel would show these lights?



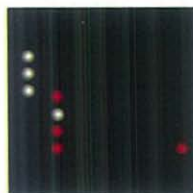
- 1.91** What type of vessel would show these lights?



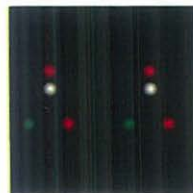
- 1.92** What type of vessel would show these lights?



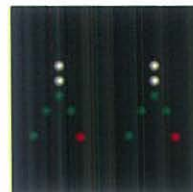
- 1.93** What daytime signal would you expect to see for this vessel?



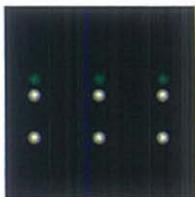
- 1.94** What type of vessels would show these lights?



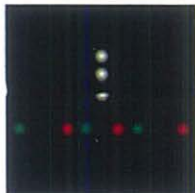
- 1.95** What type of vessel or vessels would show these lights?



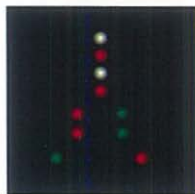
- 1.96** What type of vessel or vessels would show these lights?



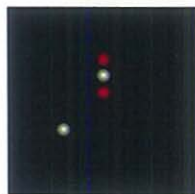
- 1.97** What type of vessel or would show these lights?



- 1.98** What type of vessel or vessels would show these lights?



- 1.99** What type of vessel would show these lights?



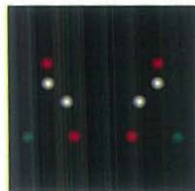
- 1.100** 1) What type of vessel would show these lights?
2) What sound signal would you expect to hear in restricted visibility?



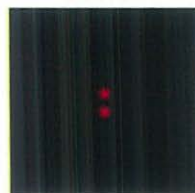
1.101 What type of vessel would show these lights?



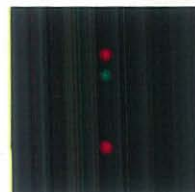
1.102 1) What type of vessel or vessels would show these lights?
2) What daytime signal would the vessels exhibit?



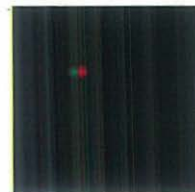
1.103 What type of vessel would show these lights?



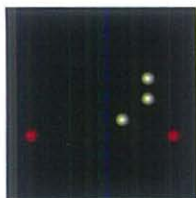
1.104 What could these lights represent?



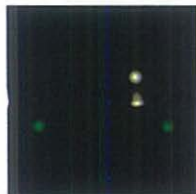
1.105 What type of vessel would show these lights?



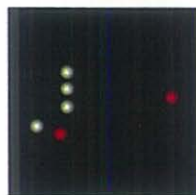
1.106 What could these lights represent?



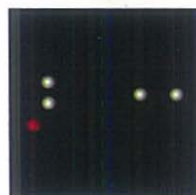
1.107 What type of vessel or vessels could these lights represent?



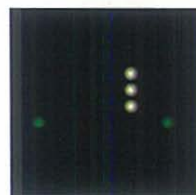
1.108 What type of vessel could these lights represent?



1.109 What type of vessel would exhibit these lights?



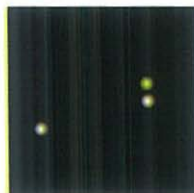
1.110 What type of vessel would these lights represent?



1.111 What type of vessel would show these lights?



1.112 What type of vessels would show these lights?



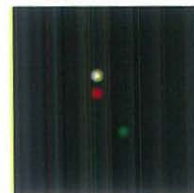
1.113 1) What type of vessel would show these lights?
2) What sound signal would the vessel make in restricted visibility?



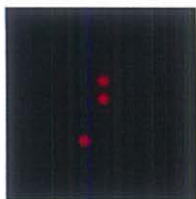
1.114 1) What type of vessel could show these lights?
2) When the vessel is not being used for her specific duty, what changes to lights (if any) would she make?



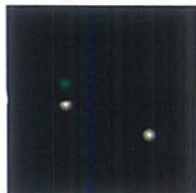
1.115 1) What type of vessel would show these lights?
2) Is there any indication of the length of the vessel?



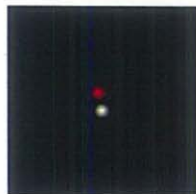
- 1.116** 1) What type of vessel could show these lights?
2) What daytime signal would the vessel show?



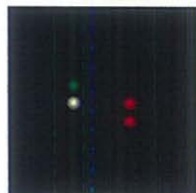
- 1.117** What type of vessel could show these lights?



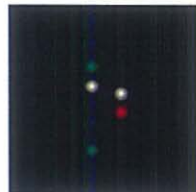
- 1.118** What type of vessel could show these lights?



- 1.119** What type of vessel would show these lights?



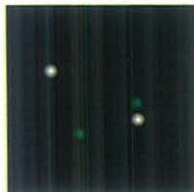
- 1.120** What type of vessel would show these lights?



- 1.121** 1) What type of vessel would show these lights?
2) What daytime signals would you expect to see?



- 1.122** 1) What type of vessel would show these lights?
2) If the vessel was to drop anchor, with her gear still extending, what changes to her lights would she make?



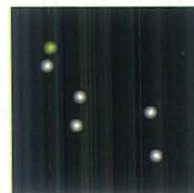
- 1.123** What type of vessel do these lights represent?



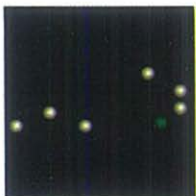
- 1.124** What type of vessel could show these lights?



- 1.125** 1) What type of vessel or vessels could these lights indicate?
2) What difference would it make if the towed object was more than 100 metres in length?



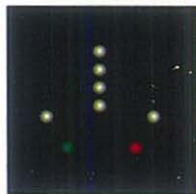
1.126 What do these lights represent?



1.127 1) What do these lights represent?
2) What difference would a dracone would make in the same situation?

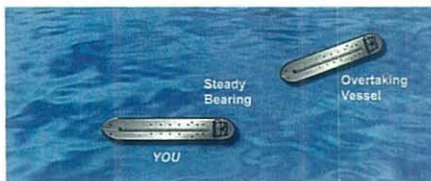


1.128 What type of vessel or vessels could these lights show?



2 Visual Collision Situations

- 2.1 What action would you take in this situation if the range is reducing?



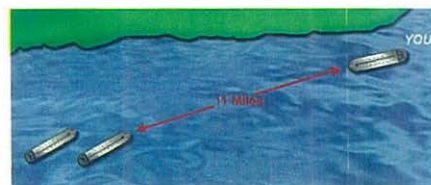
- 2.2 What action would you take in this situation if the range is reducing?



- 2.3 What action would you take in this situation if the range is reducing?



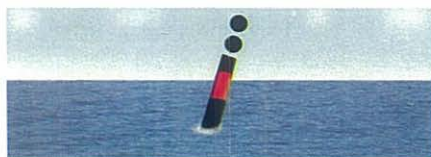
- 2.4 Both vessels are observed to be on an almost steady bearing. What action should you take?



- 2.5** You are overtaking the vessel shown below, she is on a steady bearing. What action should you take?



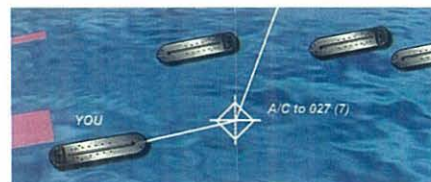
- 2.6** You are drawing up on another vessel and you are unsure as to whether or not you are overtaking. What action should you take?



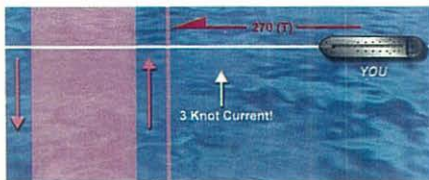
- 2.7** You have a vessel which is 22.5 degrees abaft your starboard beam on a steady bearing, what action should you take?



- 2.8** You are on an easterly course having just left a traffic separation scheme and are about to alter course to 027(T). What action would you take in this situation?



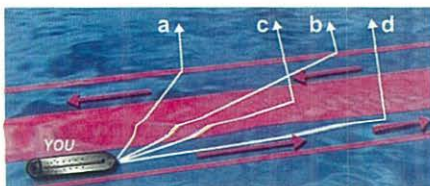
- 2.9** You are crossing a TSS with 3 knots of current on your port beam resulting in twenty degrees of set, ie course made good over the ground is now 290°T. Due to this adverse set, what new heading should you adjust to?



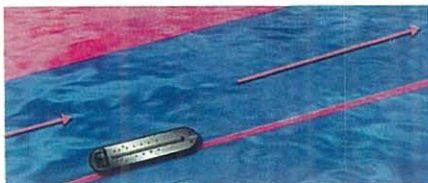
- 2.10** Identify the vessel to port and what action would you take if she was showing this signal (bearing steady)?



- 2.11** Which is the correct route to cross this separation zone?



- 2.12** What possible problems could arise by charting a course as shown near the separation line?



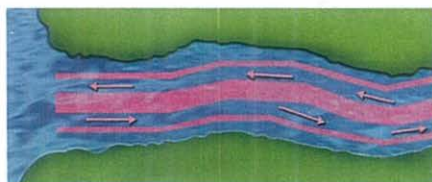
- 2.13** What action would you take in this situation?



- 2.14** You intend to overtake, which side would you overtake on?



- 2.15** This TSS is situated in a narrow stretch of water. Could the rule for narrow channels apply here?



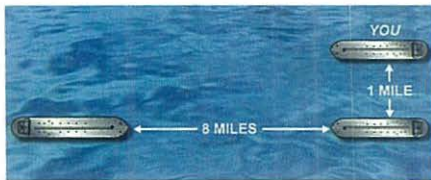
- 2.16** What action can you take to avoid collision in this situation (bearing steady)?



- 2.17** You are approaching a headland where a TSS exists. Are you required to use it?



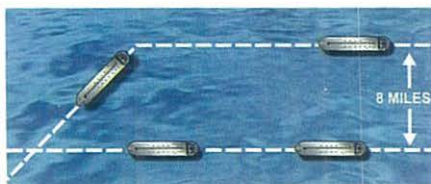
- 2.18** The vessel 1 mile on your port beam is overtaking you by about 0.5 knots/hr, and this situation develops. What action should you take?



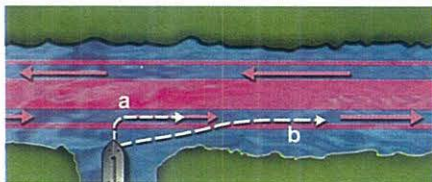
- 2.19** The following situation exists so what avoiding action could you take?



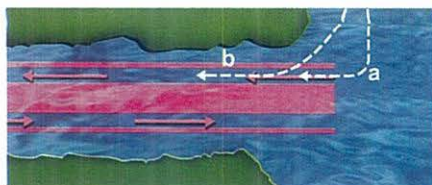
- 2.20** What action would you take if the vessel shown is overtaking you in to a situation where a risk of collision now exists?



- 2.21** Which would be the correct route to follow in this scenario?



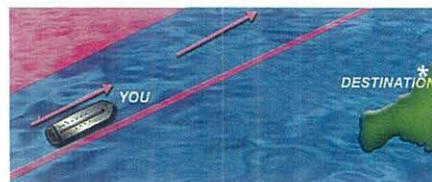
- 2.22** Which route 'A' or 'B' complies with the rules?



- 2.23** A vessel is proceeding from port 'A' to port 'B'. Is her course correct within the meaning of the rules?



- 2.24** You are proceeding along a TSS, your destination is outwith the scheme. How should you leave the TSS?



- 2.25** What action would you take in this situation (bearing steady)?



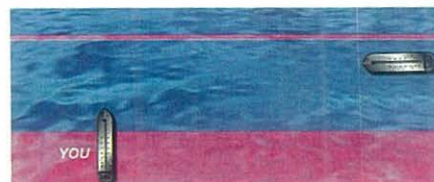
- 2.26** What action would you take in this situation (bearing steady)?



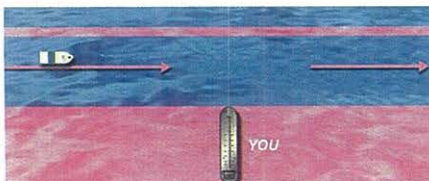
- 2.27** What initial action would you take in this situation (steady bearing)?



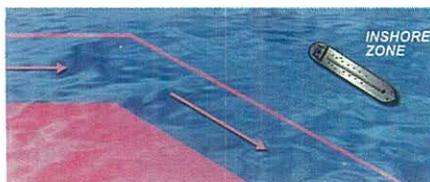
- 2.28** What action would you take in this situation (bearing steady)?



- 2.29** What action would you take in this situation (bearing steady)?



- 2.30** You are using an ITZ (inshore traffic zone). Does rule 10 apply?

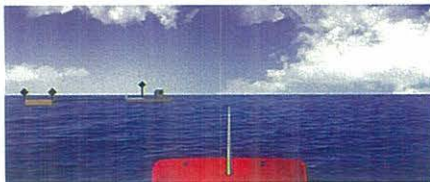


- 2.31** What action would you take in the following situation in a TSS?

The VLCC astern of you is overtaking you and you have a fishing vessel 2' away on your port bow on a steady bearing?



- 2.32** What do these signals signify?



- 2.33** Identify this situation. What alteration of course can you make if the bearing is steady?



- 2.34** Identify the vessel and the action you would take (bearing steady).



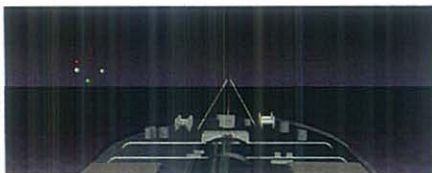
- 2.35** Identify the vessel and the action you would take (bearing steady).



- 2.36** Identify this vessel and the action you would take (bearing steady).



- 2.37** Identify the vessel and the action you would take (bearing opening slowly to port).



- 2.38** Identify the vessel and the action you would take (bearing steady).



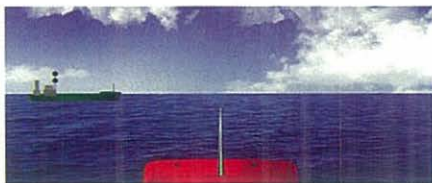
- 2.39** Identify the vessels, port bow bearing closing slowly. What action would you take?



- 2.40** Identify the vessel and the action you would take if right ahead.



- 2.41** Identify the vessel and the action you would take in this situation (bearing steady).



- 2.42** What action would you take in this situation (bearing steady)?



- 2.43** What action would you take in this situation and which rule are you taking action with?



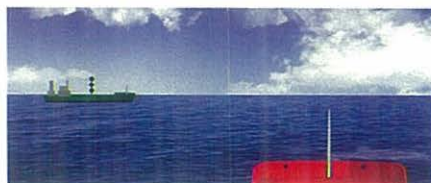
- 2.44** What action would you take in this situation (bearing opening slowly)?



- 2.45** Identify the vessel and the action you would take.



- 2.46** Identify the vessel and the action you would take if bearing is steady.



- 2.47** Identify the vessel and the action you would take in this situation.



- 2.48** Identify the vessel and the action you would take.



- 2.49** Identify the vessel to port and the action you would take if she was showing this day signal (bearing steady).



- 2.50** What action would you take here?



- 2.51** You are approaching a bend in a river when you hear one prolonged blast followed by two short blasts from around the corner. What action would you take?



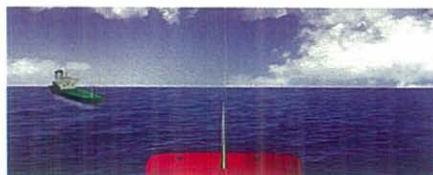
- 2.52** It has been clear weather but you sight a fog bank right ahead. You observe on radar a target 2 miles ahead on the heading line. What action would you take?



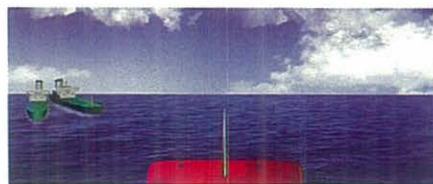
- 2.53** You are navigating in a narrow channel when a man on a jet ski crossing ahead of you falls off. What action would you take?



- 2.54** You are navigating in a TSS with vessel steady on port bow (resulting in a close-quarter situation). What action would you take?



- 2.55** The bearing of the right hand ship is steady but her efforts to keep clear have not been made effective by the presence of the vessel on her starboard side. What action would you take?



- 2.56** What action would you take in this scenario (bearing of leading vessel, closing slowly)?



- 2.57** Identify the vessel and the action you would take (bearing steady).



- 2.58** Identify the vessel and the action you would take (bearing steady).



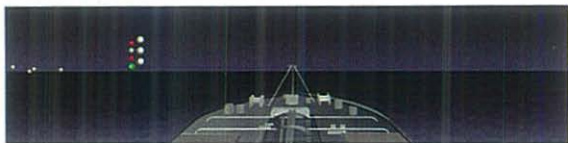
- 2.59** Identify the vessel and the action you would take (bearing opening slowly to port).



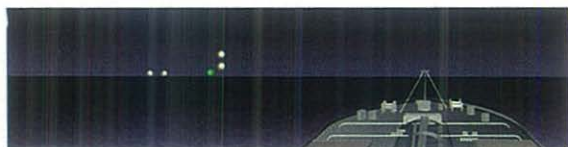
- 2.60** What action would you take in this situation (bearing steady)?



- 2.61** What do these signals signify and what action would you take (*bearing steady*)?



- 2.62** Identify the vessel and the action you would take (*bearing steady*).



- 2.63** Identify the vessel and the action you would take (*bearing steady*).



- 2.64** Identify the vessel and the action you would take (*bearing steady*).



- 2.65** Identify the vessel and the action you would take (*bearing steady*).



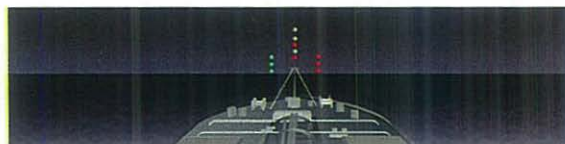
- 2.66** What action would you take in this situation (bearing steady)?



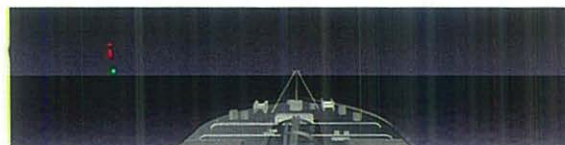
- 2.67** Identify the vessels on the port bow, bearing closing slowly, and the action you would take.



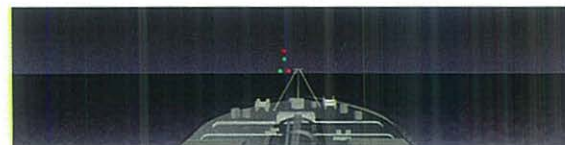
- 2.68** Identify the vessel and the action you would take if right ahead.



- 2.69** Identify the above vessel and the action you would take in this situation (bearing steady).



- 2.70** What action would you take in the above situation and which rule are you taking action with?



- 2.71** Identify the vessel and the action you would take in this situation (bearing steady).



- 2.72** Identify the vessel and the action you would take.



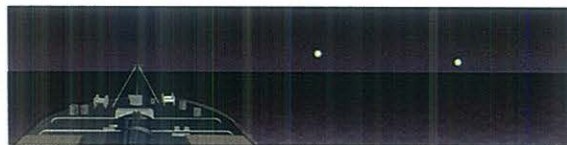
- 2.73** Identify the vessel and the action you would take if the bearing is steady.



- 2.74** Identify the vessel and the action you would take in this situation.



- 2.75** Identify the vessel and the action you would take.



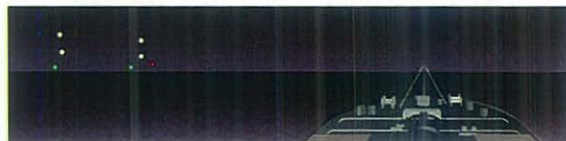
- 2.76** What action would you take here?



- 2.77** You are navigating in a TSS, vessel steady on port bow. What action would you take?



- 2.78** The bearing of the vessel closest on your port bow is steady, but her efforts to keep clear have not been made effective by the presence of the vessel on her starboard side. What action would you take?



- 2.79** What action would you take in this scenario, where the bearing of leading vessel is closing slowly?



- 2.80** Identify the vessel and the action you would take (bearing steady).



3 Radar Situations Questions

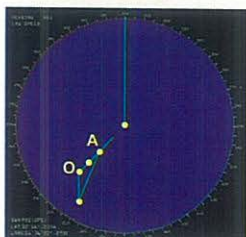
- 3.1** Restricted visibility, using a radar range of 12 nm.

A target has been tracked and at 10' the CPA was 0.3', now at 7' the CPA is 0.6'. What action should you take?



- 3.2** Restricted visibility, using a radar range of 12 nm.

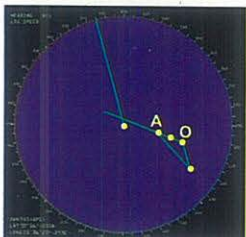
- 1) What action should you take?
- 2) Does Rule 13 apply in this situation?



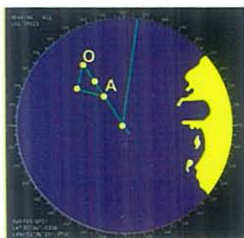
- 3.3** In restricted visibility using a radar range of 12 nm, what action should you take?



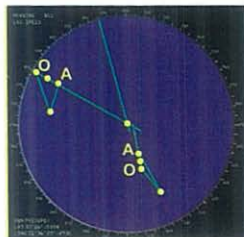
- 3.4** In restricted visibility using a radar range of 12 nm, what action should you take?



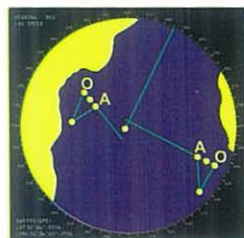
- 3.5** On a deep draught vessel in clear visibility using a radar range of 12 nm, what action should you take?



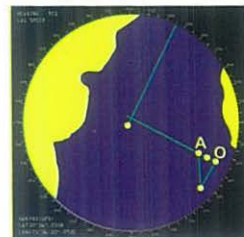
- 3.6** In restricted visibility using a radar range of 12 nm, what action should you take if the vessel to port is being overtaken?



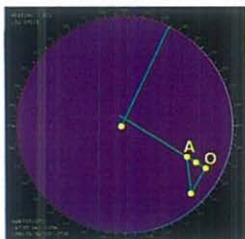
- 3.7** In clear visibility using a radar range of 12 nm, what action should you take?



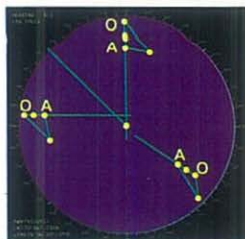
- 3.8** On a deep draught vessel in clear visibility using a radar range of 12 nm. What action should you take?



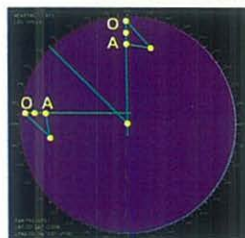
- 3.9** In restricted visibility using a radar range of 12 nm, what action should you take?



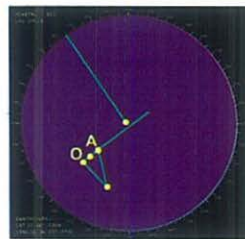
- 3.10** In restricted visibility using a radar range of 12 nm, what action should you take?



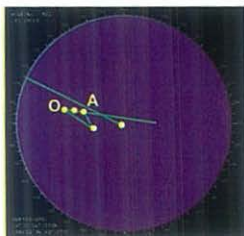
- 3.11** In clear visibility using a radar range of 12 nm, what action should you take?



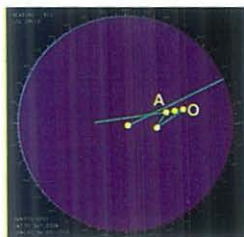
- 3.12** In restricted visibility using a radar range of 12 nm, what action should you take?



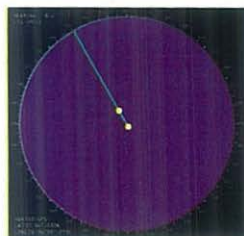
- 3.13** In clear visibility using a radar range of 12 nm, what action should you take?



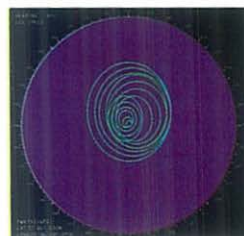
- 3.14** In restricted visibility using a radar range of 12 nm.
- 1) What action should you take?
 - 2) Would you use a sound signal if manoeuvring?



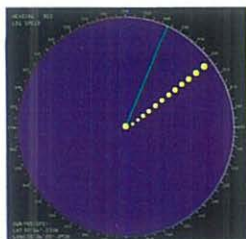
- 3.15** In restricted visibility using a radar range of 12 nm. What action should you take if a vessel is suddenly detected 2 nm ahead?



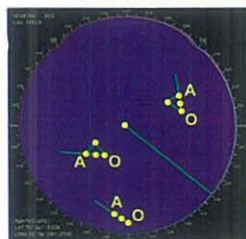
- 3.16** What could this display represent?



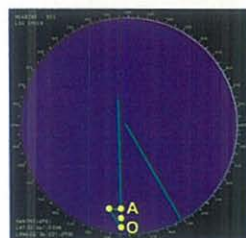
3.17 What could this display represent?



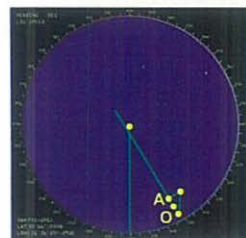
3.18 In restricted visibility using a radar range of 12 nm, you hear a fog signal apparently forward of your starboard beam. What action should you take?



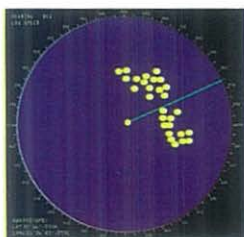
3.19 In clear visibility using a radar range of 12 nm. What action should you take?



3.20 In clear visibility using a radar range of 12 nm. What action should you take?



- 3.21** In clear visibility the following rain squall is detected on your radar. In determining a safe speed, would you assume that there are no vessels in the area?

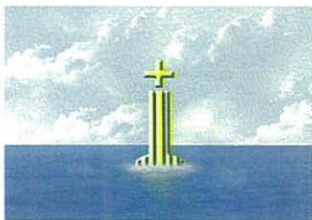


- 3.22** In restricted visibility using a radar range of 12 nm a target is detected on a steady bearing. On checking the chart, you see it is a vessel following a Deep Water Route. What action should you take?



4 IALA Buoyage

4.1 Identify the Buoy



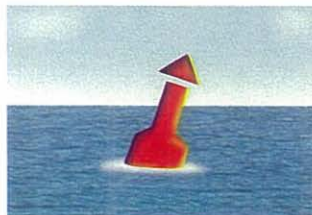
- 4.2
- 1) What type of navigation mark is shown and what are its light characteristics?
 - 2) Outbound from a US port, right ahead, what action would you take?



- 4.3
- What type of navigation mark is shown and what are its light characteristics?



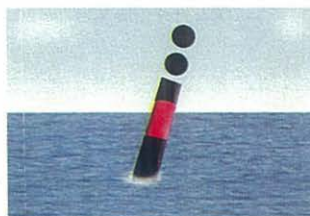
- 4.4
- What type of navigation mark is shown and what are its light characteristics?



- 4.5** What type of navigation mark is shown and what are its light characteristics?



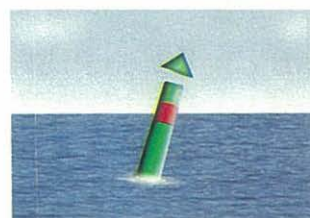
- 4.6** What type of navigation mark is shown and what are its light characteristics?



- 4.7** What type of navigation mark is shown and what are its light characteristics?



- 4.8** What type of navigation mark is shown and what are its light characteristics?



- 4.9** Your vessel is heading 000°. Would you pass between the buoys or outside of them?



- 4.10** Your vessel is heading 180°. Would you pass outside or between the buoys?



- 4.11** Your vessel is heading 090°. Would you pass between the buoys or outside of them?



- 4.12**
- 1) What type of navigation mark is shown and what are its light characteristics?
 - 2) What region of buoyage is the vessel in?



- 4.13**
- 1) What type of navigation mark is shown?
 - 2) If on a southerly course and sighted ahead, what action would you take?



- 4.14** 1) What type of navigation mark is shown and what are its light characteristics?
- 2) If on a westerly course and sighted ahead, what action would you take?



- 4.15** 1) What type of navigation mark is shown and what are its light characteristics?
- 2) If heading on a southerly course and sighted ahead, what action would you take?



- 4.16** 1) What type of navigation mark is shown?
- 2) If your vessel is on a northerly course, what action would you take?



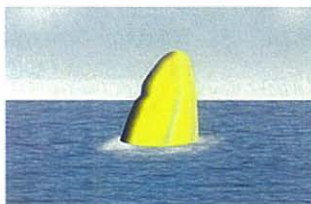
- 4.17** What type of navigation mark is shown and what are its light characteristics?



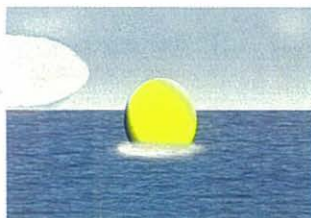
- 4.18** What type of navigation mark is shown, where would it be found and what are its light characteristics?



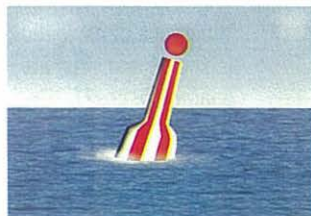
- 4.19** What type of navigation mark is shown, where would it be found and what are its light characteristics?



- 4.20** What type of navigation mark is shown, where would it be found and what are its light characteristics?



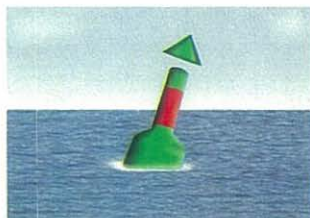
- 4.21** What type of navigation mark is shown and where would it be found?



4.22 What type of navigation mark is shown and what are its light characteristics?



4.23 What type of navigation mark is shown and what are its light characteristics?



4.24 What type of navigation mark is shown and what are its light characteristics?



4.25

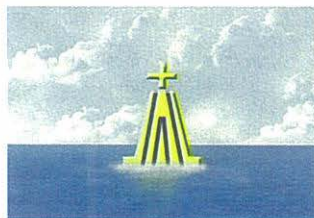
- 1) What type of navigation mark is shown and where would it be found?
- 2) Sailing outbound from port, which side do you pass?



- 4.26** What type of navigation mark is shown, where would it be found and what are its light characteristics?



- 4.27** What type of navigation mark is shown and what are its light characteristics?



5 Colregs Class 4 (OOW)

- 5.1 You are drifting off a port awaiting a pilot, expected in one hour. What navigation lights would you switch off?
- 5.2 What is VHF channel 16 to be used for?
- 5.3 In clear weather, your vessel is at anchor and another vessel is approaching you on a steady bearing. Can you sound the warning signal for a vessel at anchor consisting of one short, one long, one short blast as stated in Rule 35?
- 5.4 Which sailing vessels may carry the lights prescribed combined in a lantern?
- 5.5 Is a vessel of less than 50 metres in length required to show two mast headlights?
- 5.6 You are in restricted visibility, sounding one long blast every two minutes. To avoid another vessel, you have stopped your engines. What do you change your whistle signal to?
- 5.7 How should an OOW keep a good lookout?
- 5.8 As OOW, what would you expect your lookout to report to you?
- 5.9 If a situation arose where a departure from the rules may be necessary, are you required to make a departure?
- 5.10 What is a signal to attract attention?
- 5.11 A vessel NUC goes to anchor. What lights should she exhibit?
- 5.12 You are being overtaken by a deep draughted vessel. What action should you take?
- 5.13 You are being overtaken by a vessel not under command. What action should you take?

- 5.14** At night you see a white light flashing morse 'A'. What does this signify?
- 5.15** At night you see a white isophase light. What does this signify?
- 5.16** In Rule 2, it mentions precautions required by the 'ordinary practice of seamen'. What could these precautions include?
- 5.17** What are the main circumstances where the use of the urgency signal is justified?
- 5.18** What does the term 'Pan Pan' mean?
- 5.19** What does the term 'Mayday' mean?
- 5.20** What content information should be contained in a distress message?
- 5.21** What VHF channels are available for intership communications?
- 5.22** A vessel is fishing with surface nets which you are forced to cross. How should you cross the nets?
- 5.23** A warship is navigating in the area, exhibiting the code flags NE2. What do these signify?
- 5.24** In restricted waters, a deep drafted vessel exhibiting NUC (not under command) lights or shapes is on a steady bearing on your port side. What is the safest action?
- 5.25** What would be your action on sighting a vessel aground, immediately ahead of your own vessel?
- 5.26** As OOW, what action would you take when a fog bank is observed directly ahead?
- 5.27** A vessel restricted in her ability to manoeuvre is overtaking you. What action should you take?

- 5.28** A vessel not under command is overtaking you. What action should you take?
- 5.29** What does the flag hoist 'YG' mean?
- 5.30** What navigational lights are on an oil installation?
- 5.31** What is the recommended safe passing distance of a vessel engaged in mine clearance duties?
- 5.32** To whom do the collision avoidance rules apply?
- 5.33** What is the safe passing distance from an oil installation and where can this information be found?
- 5.34** When searching for a liferaft, what would you tell lookouts to watch for?
- 5.35** When joining a new vessel, what checks would you make to the radar set?
- 5.36** If a magnetic compass is 'dead beat', what does this mean?
- 5.37** What is contained in the 'Weekly Notices to Mariners'?
- 5.38** You have a vessel approaching from your starboard beam on a steady bearing. What avoiding action would you take?
- 5.39** You have a vessel on a steady bearing on your port bow. Can you take early action?
- 5.40** Does a vessel have a right to take action early in an encounter to disengage from what might become a dangerous situation?
- 5.41** When are vessels allowed to fish in a narrow channel?
- 5.42** You are in a narrow channel and a vessel of less than 20 metres is crossing from the starboard side. What action would you take?

- 5.43** You are rounding a bend in a narrow channel and have sounded a prolonged blast, which has subsequently been answered by another vessel. What action would you take?
- 5.44** The term 'not to impede' is used in several of the collision regulations. What do you understand by this phrase, when is a departure to be made from it and what action is then to be taken?
- 5.45** In a narrow channel, you are overtaking a vessel of less than 20 metres in length. What action would you take?
- 5.46** Are you permitted to cross to the opposite side of a narrow channel?
- 5.47** In a narrow channel, how are you required to proceed?
- 5.48** When would you postpone handover of the navigation watch?
- 5.49** You see a fishing vessel with a man on deck, slowly and repeatedly raising and lowering his arms outstretched to each side. What does this signify?
- 5.50** You see a vessel flying an international flag hoist 'N' over 'C'. What does this signify?
- 5.51** You hear the continuous sounding of a fog-signalling apparatus. What does this signify?
- 5.52** How do the 'International Collision Regulations' affect local rules made by a port or harbour and pertinent to that port only?
- 5.53** Define the word 'vessel'.
- 5.54** Define 'vessel engaged in fishing'.
- 5.55** Define the term 'sailing vessel'.
- 5.56** Define the term 'power-driven vessel'.

- 5.57** The term 'vessel engaged in fishing' does not include vessels fishing with trolling lines. What are trolling lines?
- 5.58** Define the term 'underway'.
- 5.59** Define the term 'vessel constrained by her draught'.
- 5.60** You are on a vessel a distance of some 10' from a point off land, rendezvousing with a launch for a crew change and receiving stores. What signals would you show?
- 5.61** What type of vessels are covered by the term 'vessel restricted in her ability to manoeuvre'?
- 5.62** Define the term 'vessel restricted in her ability to manoeuvre'.
- 5.63** Define the term 'not under command'.
- 5.64** Define the term 'seaplane'.
- 5.65** How should you overtake a vessel in a narrow channel or fairway?
- 5.66** A vessel of less than 20 metres in length is proceeding along a narrow channel. Who should not impede his passage?
- 5.67** A sailing vessel is proceeding along a narrow channel. Are there any vessels who should not impede his passage?
- 5.68** When proceeding along the course of a narrow channel or fairway on a power-driven vessel, who should not impede your passage?
- 5.69** How should you proceed (conduct your passage) in a narrow channel or fairway?
- 5.70** When you have taken action to avoid collision with another vessel, what should you continue to monitor?
- 5.71** Which Annex concerns signals for fishing vessels of 20 metres or more in length engaged in pair trawling?

- 5.72** What is the minimum diameter of a bell or gong on a vessel of 20 metres or more in length?
- 5.73** If more than one whistle is fitted on a vessel, what criteria determines if they are allowed to be sounded simultaneously?
- 5.74** What is the minimum audible range of a whistle on a vessel greater than 20 metres in length but less than 75 metres?
- 5.75** What is the minimum audible range of a whistle on a vessel greater than 75 metres but less than 200 metres in length?
- 5.76** What is the minimum audible range of a whistle fitted to a vessel greater than 200 metres or more in length?
- 5.77** Fishing vessels greater than 20 metres in length, when engaged in trawling, shall exhibit lights to indicate which operation they are conducting. What operations do the night and day lights indicate?
- 5.78** Fishing vessels are allowed to show additional lights to indicate the operation they are conducting. What are the requirements for spacing and minimum visibility of these additional lights?
- 5.79** What are the requirements regarding positioning of a manoeuvring light as described in the rules?
- 5.80** With regard to a sailing vessel, what are the requirements regarding vertical sectors/minimum intensity of navigational lights as fitted?
- 5.81** In the case of a power-driven vessel, what are the requirements with regard to the vertical sectors/minimum intensity of navigation lights as fitted?
- 5.82** What are the requirements regarding siting of all-round lights?
- 5.83** What are the requirements with regard to horizontal sectors of sidelights and practical cut-offs?

- 5.84** What are the requirements for shape signals on a vessel of less than 20 metres in length?
- 5.85** What is the vertical distance between shape signals?
- 5.86** What size is the shape used to indicate a diamond?
- 5.87** What is the minimum size of the shape which indicates a vessel constrained by her draught?
- 5.88** What size is the shape used to indicate a cone?
- 5.89** What size is the shape used as a ball?
- 5.90** Lights carried on a 'christmas tree' which indicate a vessel not under command, restricted in their ability to manoeuvre or a vessel constrained by her draught, should be placed at a minimum distance away from the fore and aft centreline. What is this distance?
- 5.91** What are the requirements for the horizontal positioning of masthead lights on a vessel of greater than 50 metres in length?
- 5.92** On a vessel of 20 metres or more in length, when the rules require the carriage of two or three lights in a vertical line, what are the requirements for spacing of such lights?
- 5.93** What are the requirements for the positioning of sidelights on a vessel?
- 5.94** When two masthead lights are carried on a vessel, what are the requirements for vertical positioning/separation and visibility?
- 5.95** On a power-driven vessel of 20 metres or more in length, what are the requirements for the positioning of masthead lights?
- 5.96** With respect to positioning of lights, define 'height above the hull'.

- 5.97** A pilot vessel when on duty may, in addition to the required sound signals as prescribed in Rule 35, sound an identity signal immediately after. What does this identity signal consist of?
- 5.98** A vessel greater than 100 metres in length is engaged in fishing at anchor in restricted visibility. What fog signal should she sound?
- 5.99** In restricted visibility, you hear the fog signal one prolonged blast followed by two short blasts. What or which type of vessels would sound this signal?
- 5.100** What is the fog signal for a power-driven vessel underway but stopped and making no way through the water?
- 5.101** What is the fog signal for a power-driven vessel making way through the water?
- 5.102** A vessel is fitted with a fore and aft whistle which may be operated together. If the distance between such whistles is 110 metres, can both whistles be used for giving manoeuvring and warning signals?
- 5.103** In addition to the manoeuvring signals which are made on the ship's whistle which may be supplemented by light signals, what is the minimum visibility (in miles) of this manoeuvring light?
- 5.104** What is the manoeuvring signal to indicate 'I am operating astern propulsion'?
- 5.105** What is the manoeuvring signal to indicate 'I am altering my course to port'?
- 5.106** What is the manoeuvring signal to indicate 'I am altering my course to starboard'?
- 5.107** What does the term 'prolonged blast' mean?
- 5.108** What does the term 'short blast' mean?

- 5.109** What does the term 'whistle' mean?
- 5.110** Which vessels at anchor are required to illuminate their decks?
- 5.111** You are on watch in the presence of a pilot on a lengthy river transit when the vessel blacks out. What actions should you take?
- 5.112** In the open sea, in the presence of other vessels, the steering fails. What actions should you take?
- 5.113** As the relieving officer of the watch, there is an instruction in the Master's orders that you do not understand. What action should you take?
- 5.114** What lights should a pilot vessel exhibit when not engaged in pilotage duty?
- 5.115** A small vessel is engaged in diving operations. What signal should she exhibit?
- 5.116** A vessel is engaged in fishing at anchor. What lights should she exhibit?
- 5.117** What shape would a vessel exhibit when proceeding under sail also being propelled by machinery?
- 5.118** What lights should a vessel under oars exhibit?
- 5.119** What lights would a sailing vessel of less than 7 metres in length exhibit?
- 5.120** What additional identity lights may a sailing vessel exhibit?
- 5.121** Which sailing vessels may carry their navigation lights in one combined lantern at or near the top of the mast?
- 5.122** A vessel is towing a partly submerged object with length greater than 100 metres and breadth greater than 25 metres. How should it be lit?

- 5.123** A vessel is towing a partly submerged object whose breadth is greater than 25 metres. How should it be lit?
- 5.124** A vessel is towing a partly submerged object less than 25 metres in breadth. How should it be lit?
- 5.125** How should an inconspicuous, partly submerged vessel or object be lit?
- 5.126** A vessel is towing two vessels on her starboard side. How should these vessels be lit?
- 5.127** When a pushing vessel and the vessel being pushed are rigidly connected, what lights should they exhibit?
- 5.128** Where a tow exceeds 200 metres in length, what shapes would be exhibited?
- 5.129** When may the masthead light or all-round white light on a power-driven vessel of less than 12 metres be displaced from the fore and aft centreline of the vessel?
- 5.130** What lights should a power-driven vessel exhibit which is of less than 7 metres in length and whose speed does not exceed 7 knots?
- 5.131** Instead of the lights prescribed for a power-driven vessel underway, what may a vessel of less than 12 metres in length exhibit in lieu of those prescribed?
- 5.132** When does an air cushioned vessel exhibit an all-round flashing yellow light?
- 5.133** What is the minimum visibility of an all-round white light on an inconspicuous, partly submerged vessel or object being towed?
- 5.134** What is the minimum visibility of all the navigation lights on a vessel of less than 12 metres in length?

- 5.135** What is the minimum visibility of an all-round light on a vessel of 20 metres in length?
- 5.136** What is the minimum visibility of a towing light on a vessel of 20 metres in length?
- 5.137** What is the minimum visibility of a sternlight on a vessel of 20 metres in length?
- 5.138** What is the minimum visibility of a sidelight on a vessel of 20 metres in length?
- 5.139** What is the minimum visibility of a masthead light on a vessel of 15 metres in length?
- 5.140** What is the minimum visibility of a masthead light on a vessel of 25 metres in length?
- 5.141** What is the minimum visibility of all lights on a vessel of 12 metres or more in length but less than 50 metres in length?
- 5.142** What is the minimum visibility of all lights on a vessel of 50 metres or more in length?
- 5.143** Define 'flashing light'.
- 5.144** Define 'all-round light'.
- 5.145** Define 'towing light'.
- 5.146** Define 'sternlight'.
- 5.147** Define 'sidelights'.
- 5.148** Define 'masthead light'.
- 5.149** When should the rules concerning lights be complied with?
- 5.150** What is the content of the rule concerning the 'Conduct of Vessels in Restricted Visibility'?

- 5.151** How should a seaplane on the water conduct her passage?
- 5.152** How should a vessel constrained by her draught conduct her passage?
- 5.153** Which vessels should avoid impeding the safe passage of a vessel, constrained by her draught, exhibiting the signals prescribed in rule 28?
- 5.154** When a fishing vessel is underway, which other vessels should it keep out of the way of, so far as is possible?
- 5.155** A sailing vessel underway shall keep out of the way of which vessels?
- 5.156** Which vessels should a power-driven vessel underway keep out of the way of?
- 5.157** When a vessel is directed to keep out of the way of another vessel within the meaning of these rules, how should she act?
- 5.158** When is a head-on situation deemed to exist?
- 5.159** When shall a vessel be deemed to be overtaking?
- 5.160** Who do these rules apply to?
- 5.161** What does the term WIG craft mean?

6 Colregs Rule 10: Traffic Separation Scheme

- 6.1** When navigating in a traffic lane, could you anchor in a traffic lane due to an engine breakdown?
- 6.2** When navigating in a traffic lane, would you consider anchoring in the event of poor visibility, together with a radar malfunction on your vessel?
- 6.3** When is a vessel using a TSS?
- 6.4** Does Rule 10 apply to a vessel using an Inshore Traffic Zone?
- 6.5** In what direction must a fishing vessel proceed in a traffic lane?
- 6.6** What action would you take if your charted course is near to the edge of a TSS and an end on meeting with another vessel on a reciprocal course occurs?
- 6.7** When crossing a TSS, which part/section of rules apply?
- 6.8** You are proceeding in a TSS and there is a vessel crossing on your starboard bow on a steady bearing. What action should you take?
- 6.9** Are any vessels allowed to cross a TSS at an angle that differs from 90 degrees to the general direction of traffic flow?
- 6.10** When can a vessel use an Inshore Traffic Zone?
- 6.11** Your vessel is to proceed round a headland where a TSS exists. Is use of the scheme mandatory?
- 6.12** What is a 'deep-water route'?
- 6.13** A deep-water route forms part of a traffic lane. Does Rule 10 apply?
- 6.14** You are crossing a TSS with a vessel steady on your starboard bow. What action should you take?

- 6.15** You are crossing a TSS with a fishing vessel steady on your port bow. Should you give way or stand on with caution? What action should you take?
- 6.16** You are proceeding along a TSS and a sailing vessel is on a steady bearing on your starboard bow. What action should you take?
- 6.17** You are overtaking a fishing vessel within a traffic lane. Should you stand on or give way?
- 6.18** To which traffic separation schemes does Rule 10 apply?
- 6.19** You are following a TSS with a PDV of less than 20 metres on a steady bearing on your starboard bow. What action should you take?
- 6.20** How should a vessel proceed in a traffic separation scheme?
- 6.21** How should a vessel cross a traffic lane?
- 6.22** When can you enter a separation zone or cross a separation line?
- 6.23** How should you navigate in an area near the termination of a traffic separation scheme?
- 6.24** Can you anchor in a traffic separation scheme, or near its termination?
- 6.25** How should you conduct your passage if you do not intend to use a traffic separation scheme en-route?
- 6.26** How should a vessel engaged in fishing proceed and act in a TSS?
- 6.27** Which vessels should not impede the safe passage of a power-driven vessel following a traffic lane?
- 6.28** Which vessels are exempt from complying with Rule 10?
- 6.29** How would you determine if a TSS is IMO adopted or is a local scheme?

- 6.30** What is the aim of a traffic separation scheme?
- 6.31** How would you leave a traffic separation scheme?
- 6.32** When are you allowed to enter a separation zone?
- 6.33** Your vessel is in a traffic lane with a fishing vessel crossing from the starboard side on a steady bearing. What action should you take?
- 6.34** Your vessel is crossing a TSS. A power-driven vessel of less than 20 metres in length is on a steady bearing on your starboard bow. What action should you take?
- 6.35** Your vessel is crossing a TSS and a sailing vessel is on a steady bearing on your port bow. What action should you take?

7 Colregs Rule 19: Navigation in Restricted Visibility

- 7.1** At what range is it necessary to reduce speed?
- 7.2** At what distance would you pass other traffic in restricted visibility?
- 7.3** You are overtaking another vessel that you have plotted by radar in restricted visibility. When would you take action to avoid collision?
- 7.4** In restricted visibility, when are you permitted to alter course to port?
- 7.5** In restricted visibility, what situations would you avoid by a further reduction in speed?
- 7.6** In restricted visibility, a fog signal is heard from apparently abaft the beam. What action should you take?
- 7.7** In restricted visibility, a target is approaching from the starboard beam on a steady bearing. What action should you take?
- 7.8** When a situation arises in restricted visibility which requires you to take all way off own vessel, what should you be aware of?
- 7.9** At what speed should a vessel proceed in restricted visibility?
- 7.10** You observe on radar another vessel in restricted visibility. What steps should you take after this initial observation and what alterations of course should you avoid?
- 7.11** What action would you take in restricted visibility if you hear the fog signal of a previously undetected vessel forward of your beam?
- 7.12** What action would you take in restricted visibility if you cannot avoid a close quarters situation with another vessel forward of your beam?

- 7.13** When would a power-driven vessel change her fog signal from one prolonged blast every two minutes to two prolonged blasts every two minutes?
- 7.14** In restricted visibility, what size of an alteration of course would you consider to be large enough to be apparent to another vessel observing by radar?
- 7.15** What signal does a vessel engaged in fishing at anchor make in restricted visibility?
- 7.16** What sound signal does a vessel constrained by her draught sound at anchor?
- 7.17** What signal does a vessel, restricted in her ability to manoeuvre when carrying out her work at anchor, sound in fog?
- 7.18** In addition to the appropriate fog signal for a vessel at anchor, what additional signal may be sounded to give warning of her position and the possibility of collision to an approaching vessel?
- 7.19** What is the fog signal for a pilot vessel on duty?

8 Colregs Class 2 (Ch. Mate)

- 8.1** Give six of the distress signals in Annex IV.
- 8.2** You see a very quick flashing blue light on a vessel (120 flashes per minute). In the UK what type of vessel could it be?
- 8.3** When are 'signals used to attract attention'?
- 8.4** What is the fog signal for a Pilot Vessel?
- 8.5** A vessel engaged in fishing is overtaking you. What action should you take?
- 8.6** A sailing vessel is overtaking you. What action should you take?
- 8.7** A pilot vessel is on a steady bearing off your port bow. What action should you take?
- 8.8** You are following a TSS. A sailing vessel is on a steady bearing on your starboard bow. What actions should you take?
- 8.9** You are following a TSS. A vessel of less than 20 metres in length is steady on your starboard bow. What actions should you take?
- 8.10** Your vessel is crossing a TSS, with a sailing vessel on a steady bearing on your port side. What actions should you take?
- 8.11** Your vessel is crossing a TSS. A power driven vessel of less than 20 metres in length is on a steady bearing on your starboard bow. What actions should you take?
- 8.12** Your vessel is following in the general direction of traffic flow and a fishing vessel is crossing from your starboard side on a steady bearing. What actions should you take?
- 8.13** When can you enter a separation zone?

- 8.14** Your vessel is crossing a TSS and has a fishing vessel on your starboard side on a steady bearing. What actions should you take?
- 8.15** You are passing a port fairway at a reduced speed and hear the signal 'one prolonged followed by four short blasts'. What does this signal mean?
- 8.16** You are on a vessel passing near a Pilot station. Though the vessel does not require a Pilot, what action/precautions should you take?
- 8.17** A vessel aground may sound an appropriate whistle signal. What additional signal may be sounded?
- 8.18** What are the obligations of a 'stand on' vessel?
- 8.19** How may a bottomed submarine indicate its position to surface vessels?
- 8.20** You identify that a submarine is carrying out an emergency surfacing (red flares sighted coming out of the water) but the sub fails to appear. What actions should you take?
- 8.21** There is a vessel Not Under Command overtaking you on a steady bearing. What action should you take?
- 8.22** You are approaching a bend in a river, you hear one prolonged blast followed by two short blasts. What actions should you take?
- 8.23** In clear weather a fogbank suddenly appears right ahead. You observe the radar, start making a fog signal and enter the fog bank at a safe speed. A target is 2' ahead on your heading line, what action will you take?
- 8.24** If your vessel is to be under tow, what lights would she show at night?
- 8.25** When circumstances require the vessel to take all her way off, what, if anything, should you be aware of?

9 Colregs Class 1 (Master)

- 9.1 You are manoeuvring the vessel in a river basin with the pilot. On ordering 'stop engines' the OOW tells you that there is no response. What action would you take?
- 9.2 At sea the OOW calls you to the bridge having just seen a 'submarine sunk' buoy. What action would you take?
- 9.3 You are called to the bridge by the OOW when at anchor. You can see a vessel approaching you on a steady bearing. Can you sound the warning signal consisting of one short/one long/one short blast?
- 9.4 When deciding on the composition of the watch on the bridge, what factors should be taken into account?
- 9.5 If a collision is inevitable with another vessel, what actions should be taken with the helm and engines?
- 9.6 You are off a fairway buoy with engines stopped, drifting and awaiting the pilot ETA in approximately 20 minutes. A vessel 3 miles distance and 4 points on your starboard bow is approaching on a steady bearing. What action would you take?
- 9.7 In restricted visibility, a fog signal is heard 'apparently' abaft your beam. What action should you take?
- 9.8 You are approaching the fairway buoy off a port, where a vessel is exhibiting the signals for a vessel aground. What action would you take?
- 9.9 You are called to the bridge by the OOW reporting a mine clearance vessel ahead of own vessel in a channel? What action would you take?
- 9.10 At night, a vessel is sighted fitted with an amber flashing light. What type of vessel could show such a light?

- 9.11** Your vessel is approaching the entrance to a fairway, where a vessel is dredging the mouth of this fairway. The dredger suddenly switches on a searchlight and points it at a position about 0.4 miles ahead of you. What action would you take?
- 9.12** On a vessel at anchor in restricted visibility, what additional sound signal can be made to give warning of the vessel's position?
- 9.13** You are called to the bridge by the 3/O. Your own vessel is in a TSS. A vessel is on a steady bearing 4 points off the port bow at a range of 3.7 miles. What action would you take?
- 9.14** You are navigating in a narrow channel when the vessel astern of you sounds two prolonged blasts followed by two short blasts. What action would you take?
- 9.15** When navigating in ice, a route is available which follows close inshore. What action would you take?
- 9.16** Why should you avoid using anchors when navigating in ice?
- 9.17** When deciding whether an officer can keep a bridge watch on his own, what factors would you take into account?
- 9.18** You are called to the bridge as a vessel is overtaking you, 3 points abaft the starboard beam on a steady bearing. What action should you take?
- 9.19** You are called to the bridge when a vessel is overtaking you from just abaft the port beam on a steady bearing. What action should you take?
- 9.20** You are called to the bridge as a vessel is on a steady bearing less than 60 degrees on your port bow showing her starboard side and masthead lights. What avoiding action would you take?
- 9.21** What lights may a submarine exhibit, in addition to her navigation lights?

ANSWERS

1 Navigation Lights

- 1.1**
- 1) A vessel engaged in dredging, underway but not making way through the water, or a vessel at anchor.
 - 2) One prolonged blast followed by two short blasts at intervals of not more than two minutes.
 - 3) To indicate that she is restricted in her ability to manoeuvre, three shapes in a vertical line, the highest and lowest of these shapes shall be balls and the middle one a diamond.

Two balls in a vertical line to indicate on which side the danger exists, and two diamonds in a vertical line to indicate on which side it is safe to pass.

- 1.2**
- A vessel engaged in fishing other than trawling with nets extending more than 150 metres making way through the water and seen from astern.

One prolonged blast followed by two short blasts at intervals of not more than two minutes.

- 1.3**
- 1) An air cushioned vessel less than 50 m in length operating in non-displacement mode seen from head on. One prolonged blast at intervals of not more than two minutes.
 - 2) 120 flashes or more per minute.

- 1.4**
- A sailing vessel showing the optional masthead lights.

One prolonged blast followed by two short blasts at intervals of not more than two minutes.

- 1.5**
- A power driven vessel engaged in towing where the length of tow exceeds 200 m, seen from the port side.

The vessel engaged in towing shall sound one prolonged blast followed by two short blasts at intervals of not more than two minutes.

The vessel towed (if manned) shall, immediately after the towing vessel, sound one prolonged blast followed by three short blasts.

- 1.6** A power driven vessel greater than 50 metres in length and seen from the starboard side.

- 1.7** Two vessels engaged in pair trawling and using searchlights, seen from ahead and making way through the water.

One prolonged blast followed by two short blasts at intervals of not more than two minutes.

- 1.8** A vessel engaged in trawling and not making way through the water (or at anchor).

One prolonged blast followed by two short blasts at intervals of not more than two minutes.

- 1.9** A vessel engaged in minesweeping operations seen from astern.

- 1.10** A power driven vessel less than 50 m engaged in a towing operation where the length of tow is less than 200 m and seen from the starboard side.

One prolonged blast followed by two short blasts at intervals of not more than two minutes. Immediately after this the towed vessel, if manned would sound one prolonged blast followed by three short blasts.

- 1.11** A vessel restricted in her ability to manoeuvre underway but not making way through the water.

- 1.12** A vessel engaged in fishing other than trawling, with nets extending 150 metres or less from the vessel making way through the water.

One prolonged blast followed by two short blasts at intervals of not more than two minutes.

- 1.13** A power driven vessel greater than 50 m in length engaged in a towing operation where the length of tow is less than 200 m seen from ahead, or a power driven vessel less than 50 m in length engaged in towing where the length of tow exceeds 200 m seen from ahead.
- 1.14** A power driven vessel greater than 50 m in length restricted in her ability to manoeuvre, seen from right ahead making way through the water, or a power driven vessel less than 50 m in length engaged in a towing operation where the length of tow is less than 200 m and the vessel is unable to deviate from the course she is following.
- 1.15** A sailing vessel underway and showing the optional masthead lights for a sailing vessel seen from astern.
- 1.16** An air-cushion vessel operating in the non-displacement mode seen from the port side.
- 1.17** A pilot vessel engaged in pilotage duty underway and viewed from astern or a pilot vessel engaged in pilotage duty at anchor.
- 1.18** A power driven vessel less than 12 metres in length seen from right ahead.
- 1.19** A power driven vessel of less than 50 metres in length engaged in towing a dracone where the length of the tow is 200 metres or less.
- 1.20** A vessel engaged in dredging, making way through the water and viewed from astern.
It would be safe to pass on the port side.
- 1.21** A sailing vessel of less than 20 metres in length seen from ahead.
- 1.22** A vessel not under command making way through the water and seen from the starboard side.
Two black balls in a vertical line where they can best be seen.

- 1.23** A power driven vessel engaged in towing seen from astern.
- 1.24** A vessel engaged in trawling, making way through the water and exhibiting the optional lights indicating that she is shooting her nets seen from astern.
- 1.25** A vessel constrained by her draught underway and seen from astern.

A black cylinder where it can best be seen.
- 1.26** Two vessels engaged in pair trawling, hauling their nets and not making way through the water.
- 1.27** Two vessels less than 50 m in length engaged in minesweeping operations and seen from the port side.
Safe to pass at a distance of 1000 metres.
Range of lights to be at least 2 miles.
- 1.28** A power driven vessel of 50 m or more in length engaged in towing alongside seen from ahead.
On the towing vessel:
Masthead to be visible at 6 miles
Sidelights to be visible at 3 miles
- 1.29** 1) Two vessels engaged in pair trawling making way through the water and exhibiting the optional lights to show that they are shooting their nets.

One prolonged blast followed by two short blasts at intervals of not more than two minutes.

2) The vessels can exhibit a searchlight directed forward and in the direction of the other vessel of the pair.
- 1.30** 1) A power driven vessel less than 50 m in length engaged in a towing operation, when the length of tow is less than 200 m and seen from the port side.

- 2) The towing vessel mast head should be visible at 5 miles, except if the vessel is less than 20 m in length (3 miles).

1.31 This is the possible distribution of a seaplane's lights while underway on the water.

1.32 A sailing vessel underway seen from the starboard side.

A sailing vessel underway may in addition exhibit at or near the top of the mast, where they can best be seen, two all round lights in a vertical line, the upper being red and the lower being green.

1.33 A power driven vessel less than 50 m in length engaged in a towing operation where the length of tow is less than 200 m and she is restricted in her ability to manoeuvre.

- 1.34**
- 1) A vessel greater than 50 metres in length engaged in trawling, making way through the water seen from the starboard side.
 - 2) She would switch off her sidelights.

- 1.35**
- 1) A power driven vessel greater than 50 metres in length engaged in a towing operation, where the length of tow exceeds 200 metres and is unable to deviate from the course she is following.
 - 2) 3 miles.

- 1.36**
- 1) A power driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is less than 200 metres.
 - 2) From the stern of the towing vessel to the after end of the tow.

- 1.37**
- 1) A power driven vessel greater than 50 metres in length restricted in her ability to manoeuvre and making way through the water seen from the port side.
 - 2) The following vessels can exhibit these lights as the rules consider them as being 'restricted in their ability to manoeuvre':

- A vessel engaged in laying servicing or picking up a navigation mark, submarine cable or pipeline
- a vessel engaged in dredging surveying or underwater operations
- a vessel engaged in transferring persons, provisions or cargo while underway
- a vessel engaged in the launching or recovery of aircraft
- a vessel engaged in mineclearance operations
- a vessel engaged in a towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course.

- 1.38** 1) A power driven vessel greater than 50 metres in length, constrained by her draught and seen from the port side.
2) The term 'vessel constrained by her draught' means a power-driven vessel which, because of her draught in relation to the available depth and width of navigable water, is severely restricted in her ability to deviate from the course she is following.

- 1.39** A power driven vessel less than 50 m in length restricted in her ability to manoeuvre making way through the water seen from right ahead.

- 1.40** A power driven greater than 50 m in length seen from right ahead.
OR

A power driven vessel less than 50 m in length engaged in a towing operation where the length of tow is less than 200 m in length (seen from right ahead).

- 1.41** 1) A vessel engaged on pilotage duty underway and seen from the port side.
2) No indication of length while the vessel is engaged on pilotage duty.

- 1.42** A power driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is less than 200 metres. The vessel is restricted in her ability to manoeuvre.
- 1.43**
- 1) A power driven vessel less than 50 metres in length engaged in a towing operation where the length of tow is greater than 200 metres and seen from the starboard side.
 - 2) The minimum visible range for the sidelights on the towing vessel is 2 miles.
- 1.44** Two vessels engaged in pair trawling with their nets fast upon an obstruction, not making way through the water.
- 1.45** A power driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is less than 200 metres and is unable to deviate from the course she is following (seen from the starboard side).
- 1.46** Possibly an aircraft carrier, seen from right ahead engaged in the launching and recovery of aircraft.
- 1.47** A vessel less than 50 metres in length engaged in trawling and exhibiting the optional lights indicating that she is hauling her nets and making way through the water.
- 1.48**
- 1) A vessel 50 metres or more in length, aground and seen from the starboard side.
 - 2) Three distinct strokes on the bell followed by a rapid ringing of the bell followed by 3 distinct strokes and, if greater than 100 metres in length rapid ringing of the gong for about 5 seconds at intervals of not more than one minute.
- 1.49** Two power driven vessels, possibly submarines, greater than 50 metres in length seen from the port side.
- 1.50** Two vessels less than 50 metres in length engaged in dredging, making way through the water, where it is not safe to pass between the two vessels but round the outer hand of either vessel.

- 1.51** A power driven vessel greater than 50 m in length engaged in a towing operation where the length of tow is greater than 200 m seen from the starboard side.
- 1.52** 1) Two vessels engaged in fishing other than trawling with their nets extending more than 150 metres, making way through the water seen from the port side.
2) A cone apex upwards in the direction of the outlying gear.
- 1.53** A sailing vessel underway and seen from the port side.
- 1.54** A vessel not under command making way through the water and viewed from astern or a vessel less than 50 metres in length aground.
- 1.55** A sailing vessel underway exhibiting the optional masthead lights for sailing vessels.
- 1.56** A power driven vessel greater than 50 m in length towing a dracone, where the length of tow is less than 200 m.
- 1.57** 1) A vessel engaged in fishing other than trawling with outlying gear less than 150 metres, making way through the water seen from astern.
2) 292.5° to 067.5° (T).
- 1.58** A power driven vessel less than 50 metres in length engaged in towing alongside with a vessel on either side seen from right ahead.
- 1.59** 1) A power driven vessel greater than 50 m in length seen from the port side.
2) 4.5 m
- 1.60** A power driven vessel greater than 50 metres in length seen head on, possibly an aircraft carrier.

- 1.61** 1) A vessel not under command making way through the water and seen from ahead.
2) No indication of length.
- 1.62** A vessel less than 50 m in length engaged in mineclearance operations seen from right ahead.
- 1.63** 1) A vessel of 50 metres or more in length engaged in trawling, making way through the water and seen from her port side.
2) A trawler may exhibit:
i) When shooting nets: 2 white lights in a vertical line
ii) When hauling nets: one white light over one red light in a vertical line.
iii) When the net has come fast upon an obstruction: two red lights in a vertical line.
- 1.64** 1) A power driven vessel engaged in a towing operation seen from astern.
2) The towing yellow light has the same arc of visibility as a stern light, showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right aft on each side of the vessel.
- 1.65** A power driven vessel greater than 50 metres in length engaged in a towing operation, where the length of tow is more than 200 metres in length and is restricted in her ability to manoeuvre.
- 1.66** A sailing vessel less than 20 metres in length underway and seen from ahead.
- 1.67** Two air cushioned vessels operating in the non-displacement mode, less than 50 metres in length and seen from the starboard side.
- 1.68** A power driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is less than 200 metres.

- 1.69** Two vessels engaged in fishing other than trawling with nets extending 150 metres or less seen from the port side making way through the water.
- 1.70** A sailing vessel underway showing the optional masthead lights and seen from the starboard side.
- 1.71** A vessel engaged in pilotage duty and seen from the starboard side.
- 1.72** 1) A vessel constrained by her draught seen from astern.
2) A cylinder where it can best be seen.
- 1.73** A power driven vessel engaged in a towing operation as viewed from astern and restricted in her ability to manoeuvre.
- 1.74** A vessel greater than 50 metres in length engaged in trawling, not making way through the water, seen from the port side.
- 1.75** Two vessels engaged in fishing other than trawling with nets extending more than 150 metres, seen from the starboard side, making way through the water.
- 1.76** A power driven vessel less than 50 metres in length engaged in pushing another vessel and seen from ahead.
- 1.77** 1) A power driven vessel greater than 50 metres in length restricted in her ability to manoeuvre seen from the starboard side.
2) 'Vessel restricted in her ability to manoeuvre' means a vessel which from the nature of her work is restricted in her ability to manoeuvre as required by these rules and is therefore unable to keep out of the way of another vessel.
- 1.78** A vessel engaged in Pilotage duty, Not Under Command, making way through the water and seen from the port side.

- 1.79** A power driven vessel greater than 50 m in length engaged in a towing operation where the length of tow exceeds 200 m.
- 1.80**
- 1) A vessel greater than 50 metres in length engaged in minesweeping operations seen from right ahead.
 - 2) The mineclearance lights indicate that it is dangerous for another vessel to approach within 1000 metres of the mineclearance vessel.
- 1.81** Two vessels engaged in fishing with purse seine gear with nets extending more than 150 metres, displaying the optional flashing yellow lights indicating that they are hampered by their gear, making way through the water and seen from astern.
- 1.82** A vessel engaged in trawling indicating that her nets are fast upon an obstruction and not making way through the water.
- 1.83** A sailing vessel showing the optional masthead lights seen from the starboard side.
- 1.84** A vessel engaged in fishing with nets extending less than 150 metres underway and not making way through the water, or at anchor.
- 1.85**
- 1) A power driven vessel greater than 50 metres in length constrained by her draught.
 - 2) 'Constrained by her draught' means a power-driven vessel which, because of her draught in relation to the available depth and width of navigable water, is severely restricted in her ability to deviate from the course she is following.
- 1.86** Two sailing vessels underway showing the optional masthead lights seen from right ahead.
- 1.87** A power-driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is greater than 200 metres in length and is unable to deviate from the course that she is following, seen from the port side.

- 1.88** A power-driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is greater than 200 metres and is unable to deviate from the course she is following, seen from the port side.
- 1.89** A vessel engaged in trawling greater than 50 metres in length making way through the water and exhibiting the optional lights to show that she is shooting her nets.
- 1.90** A power-driven vessel greater than 50 metres in length engaged in towing alongside seen from ahead.
- 1.91** A vessel greater than 50 metres in length engaged in trawling, making way through the water and seen from right ahead.
- 1.92** A vessel fishing showing the optional lights to indicate that she is fishing with purse seine gear and with nets extending more than 150 metres. She is making way through the water and seen from ahead.
- 1.93** It is a vessel less than 50 m engaged in a towing operation where the length of tow is more than 200 m and is restricted in her ability to manoeuvre.
- On both the towing vessel and the tow, you would expect to see a diamond shape where it can best be seen, and on the towing vessel three shapes in a vertical line – ball - diamond - ball.
- 1.94** Two vessels engaged in fishing other than trawling with nets extending 150 metres or less making way through the water and seen from ahead.
- 1.95** Two power-driven vessels greater than 50 metres in length engaged in mineclearance operations seen from right ahead.
- 1.96** Three vessels engaged in trawling as viewed from astern.

1.97 A power-driven vessel greater than 50 metres in length engaged in towing with a vessel on either side.

1.98 A vessel less than 50 metres in length engaged in dredging making way through the water, with an obstruction on her starboard side and safe to pass on her port side.

1.99 A vessel restricted in her ability to manoeuvre at anchor or a vessel restricted in her ability to manoeuvre, seen from astern.

1.100 1) A vessel greater than 50 metres in length engaged in pilotage duty at anchor, viewed from the port side.
2) At intervals of not more than one minute ring the bell rapidly for about 5 seconds, and if more than one hundred metres in length, after the ringing of the bell the gong shall be sounded rapidly for about 5 seconds in the after part of the vessel. (She may in addition sound an identity signal consisting of four short blasts).

1.101 A power driven vessel greater than 50 m in length restricted in her ability to manoeuvre seen from right ahead.

OR

A power driven vessel less than 50 m in length engaged in a towing operation where the length of tow is less than 200 m.

1.102 1) Two vessels (no indication of length) engaged in fishing with nets extending more than 150 metres making way through the water.
2) To show that there is an outlying gear of more than 150 metres from the vessel, the daytime signal will be a cone apex upwards in the direction of the gear.

1.103 A vessel not under command, not making way through the water.

- 1.104** A sailing vessel showing the optional masthead lights, seen from the port side.
- 1.105** A sailing vessel less than 20 metres in length.
- 1.106** A power-driven vessel greater than 50 metres in length pushing ahead another vessel.
- 1.107** A power-driven vessel less than 50 metres in length engaged in towing another vessel where the tow is less than 200 metres.
- 1.108** A power-driven vessel greater than 50 metres in length towing another vessel where the length of tow is more than 200 metres.
- 1.109** A power-driven vessel less than 50 metres in length engaged in towing a partly submerged object less than 25 metres in breadth.
- 1.110** A power-driven vessel less than 50 metres in length engaged in a towing operation where the tow is greater than 200 metres.
- 1.111** A power-driven vessel less than 50 metres in length, seen from right ahead.
- 1.112** A power-driven vessel towing another vessel viewed from astern.
- 1.113**
 - 1) A vessel greater than 50 metres in length aground.
 - 2) She shall at intervals of not more than 1 minute, give 3 distinct strokes on the bell followed by a rapid ringing of the bell for 5 seconds, followed by 3 distinct strokes on the bell in the forepart of the vessel and, if the vessel is greater than 100 m in length, immediately after rapid ringing of the gong for 5 seconds.

A vessel aground may give an appropriate whistle signal (Morse 'U').

- 1.114** 1) A pilot vessel at anchor, or viewed from astern.
2) When the vessel is not being used for pilotage, she shall exhibit the lights or shapes prescribed for a similar vessel of her length.
- 1.115** 1) A vessel engaged in pilot duty under way, seen from the starboard side.
2) No indication of length.
- 1.116** 1) A vessel not under command making way through the water.
2) Two balls in a vertical line where they can best be seen.
- 1.117** A trawler viewed from astern.
- 1.118** A vessel engaged in fishing other than trawling, not making way through the water, or at anchor.
- 1.119** A vessel engaged in trawling, not making way through the water, showing the optional signal to indicate that her nets are fast upon an obstruction.
- 1.120** A vessel engaged in trawling, making way through the water, showing the additional signal to indicate that she is hauling her nets.
- 1.121** 1) A vessel engaged in trawling, making way through the water, showing the additional signal to indicate that she is shooting her nets.
2) To indicate that she is fishing, she would display two cones apexes together in a vertical line, one above the other and, to indicate she is shooting her nets, the international code flag 'Z'.
- 1.122** 1) A trawler greater than 50 metres in length, seen from the stbd side.
2) If the vessel was to drop anchor, with fishing gear still extending, she would switch off her sidelights.

- 1.123** A power-driven vessel less than 50 metres in length underway, possibly making way, seen from the port side.
- 1.124** A power-driven vessel less than 20 metres in length, exhibiting a combined lantern instead of sidelights.
- 1.125** 1) A power-driven vessel towing a partly submerged object which is 25 metres or more in breadth seen from astern.
2) If the tow exceeds 100 metres in length, additional all round white lights should be placed, so that the distance between the forward light and after light should not exceed 100 metres.
- 1.126** A power-driven vessel greater than 50 metres in length, engaged in a towing operation where the object being towed is over 100 metres in length and less than 25 metres in breadth.
- 1.127** 1) A power-driven vessel engaged in towing two vessels viewed from astern
OR
A power-driven vessel engaged in towing a partly submerged object of 100 metres or less in length and 25 metres or less in breadth.
2) A dracone need not exhibit a light at or near the forward end.
- 1.128** A power-driven vessel greater than 50 metres in length engaged in a towing operation where the length of tow is more than 200 metres, towing a partly submerged object whose breadth is more than 25 metres.

2 Visual Collision Situations

- 2.1** Take the following actions:
- Sound 5 short blasts
 - call Master
 - put man on the wheel
 - evasive action, sound 2 short blasts and make a large alteration of course to port.
- 2.2** Take the following actions:
- Sound 5 short blasts
 - call Master
 - put man on the wheel
 - evasive manoeuvre, sound 1 short blast and make a large alteration of course starboard.
- 2.3** Take the following actions:
- Sound 5 short blasts
 - call Master
 - put man on the wheel
 - take evasive action, sound 1 short blast and make a large alteration of course to starboard in the region of 60/90 degrees until the other vessel is on or abaft the starboard beam.
- 2.4** Sound 2 short blasts and alter course to port. You have the right to take early action to disengage from what may become a dangerous situation.
- 2.5** Sound 2 short blasts and alter course to port to pass astern of the other vessel. This puts the two vessels on diverging courses and rapidly resolves the situation.
- 2.6** When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly. Sound 2 short blasts and make a bold alteration of course.

- 2.7** A crossing situation exists, therefore take action to avoid collision by either a reduction in speed and/or an alteration in the region of 60-90 degrees to port to allow the other vessel to draw ahead of you.
- 2.8** Maintain present heading and wait until safe to alter course to pass astern of the last vessel in the group of westbound ships.
- 2.9** Remain on course. A vessel crossing a traffic separation scheme should cross on a heading as near as practicable at right angles to the general direction of traffic flow.
- It is the aspect presented to other vessels that is important.
- 2.10** A vessel constrained by her draught.
- Own vessel is required not to impede her safe passage, make a large reduction in speed and allow her to cross ahead. Avoid altering course as she is not relieved of her obligation to give way.
- 2.11** C.
- 2.12** If you were to encounter another vessel from outside the lane, on a reciprocal or nearly course, you are both required to alter course to starboard (rule 14). Such a situation could cause both vessels to become involved in further collision-situations, making it difficult to return to their correct traffic lane or zone.
- 2.13** Having given the ship 5 short blasts, if no response take early action to avoid collision, either altering course to starboard or reducing speed. Report rogue vessel to VTS, nearest coast radio station. Hoist flag 'YG'.
- 2.14** Preferably her starboard side, to keep my own starboard hand clear.
- 2.15** No, a vessel using a TSS must comply with rule 10.

- 2.16** A reduction in speed and allow the other vessel to draw ahead, though an alteration of 60 degrees to port is effective also for a vessel approaching from near the starboard beam.
- 2.17** No, but a vessel not using a TSS shall avoid it by as wide a margin as practicable.
- 2.18** It would be good seamanship to alter course to starboard and give the vessel on my port beam room to deal with her head on situation.
- 2.19** Sound two short blasts and make a large alteration of course to port.
- 2.20** Sound 1 short blast and alter course to starboard.
- Any vessel overtaking any other is to keep clear of the vessel being overtaken. This situation does not apply here as the overtaking vessel was some distance away.
- 2.21** Route 'B' because it joins the traffic lane at as small an angle as practicable.
- 2.22** Route A, as a vessel shall normally join or leave a scheme at its terminations.
- 2.23** Yes, she is not through traffic.
- 2.24** At as small an angle to the general direction of traffic flow as practicable.
- 2.25** Stand on with caution.
- Sound 5 short and rapid blasts.
- 2.26** Either sound 1 short blast and alter course to starboard or reduce speed and allow the ferry to cross ahead.
- 2.27** Initially stand on with caution (R10) as a sailing vessel shall not impede the safe passage of a power-driven vessel following a traffic lane.

When it becomes apparent that the sailing vessel is not taking action to avoid collision, R10 does not relieve any vessel of her obligation under any other rule. Rule 18 requires that a power driven vessel shall keep out of the way of a sailing vessel, requiring a reduction in speed or an alteration of course to port.

- 2.28** Alter course to starboard as in Rule 15, sounding 1 short blast, however take care with the aspect presented to other vessels following the lane as it may be more prudent to reduce speed.
- 2.29** You are not using the scheme but crossing it, therefore required to keep out of the way of the fishing vessel, reducing speed may be the most appropriate action.
- 2.30** No, because it does not form part of the scheme.
- 2.31** A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane. This initially applies, but in rule 10 a TSS does not relieve any vessel of her obligation under any other rule. Sound 5 or more short blasts, if she fails to take action slow down or sound 2 short blasts and alter course to port.
- 2.32** A vessel engaged in towing a partly submerged object where the length of tow is 200 metres or more.
- 2.33** A vessel engaged in towing a partly submerged object, length of tow less than 200 metres in length.
- Sound 1 short blast and alter course to starboard.
- 2.34** A vessel engaged in a towing operation where the length of tow is less than 200 metres towing a partly submerged object.
- Maintain course and speed/stand on with caution. If necessary sound 5 or more short blasts.
- 2.35** A vessel engaged in fishing.

Sound 2 short blasts and make a large alteration of course to port passing well clear of any nets astern of him.

2.36 It is a power-driven vessel.

Maintain course and speed/stand on with caution. If necessary sound 5 short and rapid blasts.

2.37 It is a vessel engaged in fishing other than trawling of less than 50 metres, making way through the water, seen from the starboard side with nets extending more than 150 metres in the direction of the single white light.

To make an early and large alteration of course to port or starboard would be prudent.

2.38 A vessel not under command, seen from the port side.

Sound 1 short blast and alter course to starboard.

2.39 A vessel engaged in a towing operation of more than 200 metres. Risk of collision may exist when an appreciable bearing change is evident particularly when approaching a large vessel or a tow at close range.

Sound 5 or more short blasts and if no action is taken reduce speed and allow to cross ahead or sound 1 short blast and if necessary make a very large alteration of course to starboard.

2.40 A vessel restricted in her ability to manoeuvre with an obstruction on the side with 2 balls, and safe to pass on the side where there are two diamonds.

Sound 2 short blasts and alter course to port.

2.41 A vessel not under command.

Sound 2 short blasts and alter course to port.

- 2.42** Stand on with caution, if no action is taken sound 5 short blasts.

The sailing vessel is giving the additional day signal to show that she is using her engines.

- 2.43** Sound 1 short blast and alter course to starboard.

Taking action in accordance with rule 18.

- 2.44** Sound one short blast and make a large alteration of course to starboard or sound two short blasts and make a large alteration to port.

- 2.45** It is a vessel at anchor.

Alter course to port and keep well clear of her stern.

- 2.46** A vessel restricted in her ability to manoeuvre.

Sound 2 short blasts and alter course to port passing round her stern or reduce speed and allow her to pass ahead.

- 2.47** It is a vessel aground.

Take all way off my vessel.

Call Master and verify the vessel's position.

Make contact with vessel aground, determine when she went aground and her draught. On the basis of this information an informed decision can be made as to the required course of action.

- 2.48** The vessel is at anchor.

Maintain course and speed but keeping well clear.

- 2.49** A vessel constrained by her draught. Own vessel is required not to impede her safe passage.

Make a large reduction in speed and allow her to cross ahead of me.

2.50 Make a series of compass bearings to ascertain if risk of collision exists. If bearing is steady sound one short blast and alter course to starboard.

2.51 The signal is for a hampered vessel in restricted visibility. Reduce speed making preparations for entering restricted visibility sounding the fog signal and navigate with caution until danger of collision is over.

2.52 Take all way off allowing more time to assess the situation and carry out radar plot to make full assessment.

Rule 7c states 'Assumptions shall not be made on the basis of scanty information, especially scanty radar information'.

No other action taken until assessment of the situation is made.

2.53 Stop engines or put them astern if necessary and if room to manoeuvre around, do so. If the Foc'sle is manned, drop both anchors if required to take the way off.

2.54 Sound 5 short and rapid blasts
If no immediate corrective action, sound 1 short blast and alter course to starboard (large alteration) or take all way off the vessel.
In no way would the TSS alter my action!

2.55 Sound 1 short blast and alter course to starboard as an act of good seamanship.

2.56 It appears to be a fleet of fishing vessels, with no shapes yet visible.

Action taken would be a departure from the rules by making a 'large' alteration of course to port to avoid the fishing fleet.

2.57 A vessel not under command.

Sound 2 short blasts and alter course to port, if she has lost her propulsion she will be slowing down, so would not reduce speed and allow her to cross ahead.

- 2.58** A vessel not under command.

Sound 1 short blast and alter course to starboard.

- 2.59** It is a vessel engaged in fishing, with nets extending more than 150 metres in direction of cone.

Sound 2 short blasts and alter course to port, some vessels may have surface nets extending to several miles.

- 2.60** Sound 1 short blast and make an alteration of course to starboard.

- 2.61** A vessel engaged in towing an inconspicuous or partly-submerged object more than 25 metres in breadth, where the length of tow is 200 metres or more and she is restricted in her ability to manoeuvre.

Reduce speed and allow her to cross ahead or sound 2 short blasts and alter course to port.

- 2.62** A vessel of less than 50 metres in length engaged in a towing a partly-submerged object less than 25 metres in breadth, where the length of tow is less than 200 metres.

Maintain course and speed/stand on with caution. Sound wake up signal, ie 5 short and rapid blasts

- 2.63** A vessel engaged in fishing other than trawling, making way through the water, with outlying gear less than 150 metres from vessel.

Sound 2 short blasts and make a large alteration of course to port passing well clear of any nets astern of him.

- 2.64** Power driven vessel, possibly greater than 50 metres in length.

Maintain course and speed/stand on. Sound wake up signal, ie 5 short and rapid blasts.

- 2.65** A vessel engaged in mine clearance operations less than 50 metres in length (seen from the starboard side).

Reduce speed and allow the vessel to cross ahead or sound 2 short blasts and alter course to port. In both cases, the mine clearance vessel is to be avoided by a distance of at least 1000 metres.

- 2.66** A vessel of less than 50 metres in length engaged in a towing operation, length of tow more than 200 metres.

Keep my course and speed/stand on. If necessary sound wake up signal.

- 2.67** A vessel of more than 50 metres in length engaged in a towing operation of more than 200 metres, restricted in her ability to manoeuvre. Risk of collision may exist when an appreciable bearing change is evident particularly when approaching a large vessel or a tow at close range.

Either reduce speed and allow to cross ahead or sound 2 short blasts and alter course to port.

- 2.68** A vessel of more than 50 metres in length restricted in her ability to manoeuvre with an obstruction on her port side, and safe to pass on her starboard side.

Sound 2 short blasts and alter course to port.

- 2.69** A vessel not under command, making way through the water.

Sound 2 short blasts and alter course to port.

- 2.70** Sound 1 short blast and alter course to starboard.
Taking action in accordance with rule 18.
- 2.71** A sailing vessel.
Sound one short blast and make a large alteration of course to starboard.
- 2.72** It is a vessel at anchor greater than 50 metres in length seen from the starboard side.
Keep clear.
- 2.73** A vessel restricted in her ability to manoeuvre.
Keep clear of vessel.
Sound 2 short blasts and alter course to port passing round her stern, or reduce speed and allow her to pass ahead.
- 2.74** It is a vessel aground, seen from the starboard side.
Take all way off.
Call Master, verify the vessels position.
Make contact with vessel aground, determine when she went aground and at what draught. On the basis of this information, an informed decision can be made as to the required course of action.
- 2.75** The vessel is at anchor, seen from the port side.
Maintain course and speed, but passing well clear.
- 2.76** Take a series of compass bearings to ascertain if risk of collision exists. If the bearing is steady sound one short blast and alter course to starboard.
- 2.77** Stand on with caution, if no action is taken sound 5 short and rapid blasts.
If no immediate corrective action, sound 1 short blast and make a very large alteration of course to starboard or take all way off vessel.

2.78 Sound 1 short blast and alter course to starboard as an act of good seamanship.

2.79 It is a fleet of fishing vessels.

Action taken would be a departure from the rules by making a 'large' alteration of course to port to avoid the fishing fleet.

2.80 A vessel not under command, seen from the starboard side, making way through the water.

Sound 2 short blasts and alter course to port, if she has lost her propulsion she will be slowing down, so would avoid reducing speed.

3 Radar Situations Answers

- 3.1** A bold alteration of course to starboard (Rule 19).
- 3.2** 1) Bold alteration of course to starboard, as alteration of course towards a vessel abeam or abaft the beam is not permitted.
2) No, Rule 13 applies to vessels in sight of one another.
- 3.3** A bold alteration of course to starboard.
- 3.4** A large alteration of course to port, as own vessel cannot alter course towards a vessel abeam or abaft the beam.
- 3.5** You are the stand-on vessel. If other vessel does not take any action in good time, reduce speed/stop and allow her to cross ahead.
- 3.6** A bold alteration of course to port (Rule 19, Section d-1).
- 3.7** Bold alteration of course to starboard in ample time.
- 3.8** Bold alteration of course to starboard in ample time.
- 3.9** A reduction in speed to allow the other vessel to cross ahead.
OR
A large alteration of course to port, as you are not to alter towards a vessel abeam or abaft the beam (Rule 19).
- 3.10** Bold alteration of course to starboard in ample time.
- 3.11** A large alteration of course to starboard in ample time.
- 3.12** Bold alteration of course to starboard, as you alter towards a vessel abeam or abaft the beam (Rule 19).
- 3.13** You are overtaking the vessel. A large alteration of course to port.

- 3.14** 1) Bold alteration of course to starboard (Rule 19).

Note: Alteration of course to port is allowed as target is being overtaken, however the vessel is crossing ahead.

- 2) No. Manoeuvring signals are for vessels in sight of one another.

- 3.15** Stop/take all way off to allow more time to assess the situation. Sound the fog signal more frequently.

- 3.16** The wide arcs (or concentric circles) are shown when own vessel is within about 1 nm from an active SART (Search and Rescue Transponder).

- 3.17** A blip code indicates the bearing of a SART in close proximity.

- 3.18** Reduce speed to the minimum at which own vessel can be kept on course. If necessary, take all way off and in any event navigate with extreme caution until danger of collision is over.

- 3.19** The CPA is insufficient, a bold alteration of course to starboard is required.

- 3.20** Stand on with caution. If the other vessel does not take any action in good time, then boldly alter course to starboard or slow down/stop to allow it to pass ahead.

- 3.21** No, because the rain affects radar detection and a ship may be hidden in the rain clutter.

- 3.22** Make a large alteration of course to starboard - the fact that the vessel is likely to be constrained by her draught does not alter the action required by own vessel (Rule 19).

4 IALA Buoyage

- 4.1** Emergency wreck marking buoy
Alternating blue and yellow flashing light, 1 second flashing with a 0.5 second interval.
- 4.2** 1) IALA-B.
Preferred channel to starboard.
Green light (2+1).
2) Alter course to port and leave it on your starboard side.
- 4.3** IALA-B.
Preferred channel to port.
Red light (2+1).
- 4.4** IALA-B.
Starboard hand mark.
Red light any rythmn except (2+1).
- 4.5** IALA-B.
Port hand mark.
Green light any rythmn except (2+1).
- 4.6** Isolated danger mark.
Placed on an isolated danger of limited extent, which has navigable water all around.
White flashing light, group flash 2.
- 4.7** IALA-A.
Preferred channel to starboard buoy.
Red light (2+1).
- 4.8** IALA-A.
Preferred channel to port buoy.
Green light (2+1).
- 4.9** Danger lies between the buoys, alter course and pass round the outside of either buoy.

- 4.10** Pass between the two buoys.
- 4.11** Pass round the outside of the marks, danger is in the middle. Preferably alter course to starboard leaving the south cardinal mark on your port hand thus leaving your starboard side clear.
- 4.12**
- 1) West cardinal mark,
White light VQ(9) 10s or Q(9) 15s
 - 2) No indication - cardinal marks are used in both IALA A and IALA-B.
- 4.13**
- 1) South cardinal mark,
White light VQ(6 + 1) 10s or Q(6 + 1) 15s
 - 2) Take all way off and consider a crash stop.
Call, the master and check the position.
The vessel is in close proximity to the danger in question
- 4.14**
- 1) North cardinal mark. White light VQ or Q flashing.
 - 2) Alter course to starboard and leave the buoy on my port side.
- 4.15**
- 1) East cardinal mark
White light VQ(3) 5s or Q(3)10s.
 - 2) Alter course to port and leave it down my starboard side.
- 4.16**
- 1) East cardinal mark.
White light VQ(3) 5s or Q(3) 10s
 - 2) Alter course to starboard and leave the buoy on my port side.
- 4.17** Port hand mark.
Red light any rhythm except (2+1).
- 4.18** Safe water mark.
Centreline, mid-channel or landfall buoy.
White light isophase, occulting, single long flash of 10 seconds or Morse 'A'.

- 4.19** Special mark starboard hand.
ODAS buoys, spoil ground, TSSs, military exercise areas, cables or pipelines including sewer outfall pipes or recreational areas.
Yellow light, any rhythm not used for white lights.
- 4.20** Special mark.
ODAS buoys, TSSs, spoil grounds, military exercise areas, cable or pipelines including sewer outfall or recreational areas.
Yellow light, any rhythm not used for white lights.
- 4.21** Safe water mark.
May be used as a centreline, mid channel or landfall buoy.
White light, occulting, isophase, single long flash of 10 seconds or morse 'A'.
- 4.22** IALA-A.
Starboard hand mark.
Green light any rhythm except (2+1).
- 4.23** IALA-A.
Preferred channel to port.
Green light (2+1).
- 4.24** IALA-A.
Preferred channel to starboard.
Red Light (2+1).
- 4.25** IALA-A.
1) Port hand mark.
Red light any rhythm except (2+1).
2) Leave the buoy on my starboard side.

4.26 Isolated Danger Mark.

Placed on an isolated danger of limited extent which has navigable water all around it.

White flashing light group flash 2.

4.27 Emergency wreck marking buoy

Alternating blue and yellow flashing light

1 second flashes with 0.5 second interval.

5 Colregs Class 4 (OOW)

- 5.1** NONE, your vessel is underway and stopped and must exhibit the lights for a power-driven vessel underway as in Rule 23.
- 5.2** Distress, urgency brief safety communications and for calling to establish communications, which should then be conducted on a working channel.
- 5.3** No, these signals apply in restricted visibility. As vessels are in sight of one another, sound five or more short and rapid blasts.
- 5.4** Sailing vessels of less than 20 metres in length.
- 5.5** A vessel of less than 50 metres in length is not obliged to exhibit such lights but may do so.
- 5.6** You would continue sounding one long blast every two minutes until the vessel stopped in the water, and then begin sounding two long blasts every two minutes.
- 5.7** By sight and hearing as well as by all available means, eg radar, binoculars, traffic information on VHF and Navtex messages, particularly those giving information about deep draft vessels and vessels under tow.
- 5.8** An OOW can expect the lookout to report:
- Any lights, vessels, or large floating objects seen and, in restricted visibility, any fog signals heard
 - although in congested waters every light which is seen could not be reported, report those which are likely to pose a collision risk, especially small craft which may not be observed easily from the bridge.
- 5.9** Yes, if a situation arose which required a departure from the rules, a vessel, in addition to being justified in making a departure, would have been expected to do so.

- 5.10** If it is necessary to attract the attention of another vessel, any vessel may make light or sound signal that cannot be mistaken for any signal authorised elsewhere in these rules, or may direct the beam of her searchlight in the direction of danger, in such a way as not to embarrass any vessel. Any light to attract the attention of another vessel shall be such that it cannot be mistaken for any aid to navigation. For the purpose of these rules, the use of high intensity intermittent or revolving lights such as strobe lights, shall be avoided.
- 5.11** Normal anchor lights for a vessel of her size
- 5.12** Stand on. The vessel that is overtaking keeps out of the way under Rule 13(a).
- 5.13** Stand on with caution. A vessel NUC must keep out of the way (Rule 13(a)).
- 5.14** It is the light signal for a safe water mark, indicating navigable water all around. It may be used as a mid-channel or landfall buoy.
- 5.15** It is a safe water mark indicating navigable water all around. It may be used as a mid-channel or landfall buoy.
- 5.16** The ordinary practice of seamen may include:
- A vessel underway keeping out of the way of a vessel at anchor
 - when a vessel anchors, she should not endanger any other vessel at anchor or anchor too close to them
 - in dense fog, a vessel without operational radar may not be justified in being underway, but should anchor if safe to do so
 - when two vessels are approaching one another in a narrow channel, it is customary for the vessel with the tide against her to wait
 - a TSS which has not yet received recognition is therefore not mandatory, but it would be good seamanship to comply with it.

- 5.17** The urgency signal is justifiable when:
- The ship is disabled, but not in imminent danger, eg requesting tug assistance
 - there has been a loss of person(s) overboard
 - requesting medical advice or assistance
 - requesting that a watch be kept for an overdue ship or aircraft.
- 5.18** It indicates that the calling station has a very urgent message to transmit concerning the safety of the ship, aircraft, other vehicle or the safety of a person. It shall have priority over all other communications, except distress.
- 5.19** It indicates that a ship, aircraft or the safety of life is threatened by grave and imminent danger and requests immediate assistance.
- 5.20** A distress alert should provide identification of the station in distress and its position. It may also contain information regarding the nature of the distress, the type of assistance required, the course and speed of the vessel, time of transmission and any further information which may facilitate the rescue.
- 5.21** 6, 8, 9, 10, 13 and 72.
- 5.22** If you have no option but to cross the nets:
- Stop engines (propeller if CPP) when passing over the line of nets
 - cross the nets as near as practicable to 90 degrees, attempting to pass between the two buoys which normally support the net
 - inform the Skipper of the fishing vessel.
- 5.23** It signifies that submarines are operating in the area.
- 5.24** The safest action is to reduce own vessel's speed and allow the deep draughted vessel to pass ahead.
- 5.25** Take the following action:
- Take all way off own vessel

- inform the Master
- echo Sounder must be operating
- check the position of own vessel and vessel aground
- call up the vessel aground on VHF and ascertain her draught, the time of grounding and check the time against the height of tide.

5.26 If fog is directly ahead:

- Engines to be placed on stand-by
- reduce to a safe speed
- inform the Master
- lookouts posted
- hand steering engaged
- radars operating
- commence radar plot of targets in the vicinity
- commence sounding the fog signal.

5.27 Stand on with caution.

5.28 Stand on with caution.

5.29 'YG' means you appear to be contravening a TSS.

5.30 All round white light exhibiting Morse 'U' - 'You are running in to danger'.

5.31 1000 metres.

5.32 All vessels upon the high seas and all waters connected therewith navigable by seagoing vessels.

5.33 The safe passing distance from an oil installation is 500m, details are found in the Annual Summary of Notices to Mariners and 'The Mariners Handbook'.

5.34 By night to look for:

- Pyrotechnics, rocket parachute flares and hand-held flares
- white light on life raft

- flashing torchlight or signalling lamp
- reflection of retro reflective tape on canopy.

By day to look for:

- A flash from signalling mirror (Heliograph)
- orange colour given off by liferaft or a smoke float.

5.35 Upon joining check the following on the radar:

- Performance monitor (as applicable)
- whether 3 cm or 10 cm
- blind and shadow sectors that may be noted
- operation of the radar controls.

5.36 The card is steady, and does not oscillate easily with the vessels movement.

5.37 The weekly 'Notices to Mariners' contain:

- Index to charts affected in that week
- temporary and Preliminary Notices
- corrections to charts
- corrections to light lists
- corrections to radio signals
- corrections to sailing directions
- navigational warnings.

5.38 Make a substantial alteration of course to starboard, as such action does not involve the crossing ahead of the other vessel. Sound two short blasts.

5.39 For a power driven vessel on your port side in a crossing situation, Rule 17 a(ii) permits a stand on vessel to act at an earlier stage...
"The latter may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep her course and speed is not taking appropriate action in compliance with these rules."

This can be done without having to justify such action as a necessary departure to avoid immediate danger.

- 5.40** Yes, a vessel has the right to take early action in an encounter to disengage from what could be a dangerous situation.
- 5.41** The rule suggests that vessels are allowed to fish, when the channel is not being used, or when they see oncoming traffic and can get out of the way in ample time.
- 5.42** Although the vessel should not impede your passage you must still keep clear.
- 5.43** When hearing a prolonged blast in response you can reply with one long blast on the ship's whistle and navigate with caution.
- It would be an act of good seamanship that the vessel stemming the tide (tide against) can more easily maintain position and should wait until the other vessel has passed. In any event proceed with caution.
- 5.44** When a vessel is required not to impede the passage of another vessel, such vessel shall so far as practicable navigate in such a way as to avoid the development of risk of collision. If, however, a situation has developed so as to involve risk of collision, the relevant steering and sailing rules should be complied with". (IMO Maritime Safety Committee).
- 5.45** Keep clear.
- 5.46** For such purposes as changing Pilots or proceeding to a side channel or to a berth or terminal.
- 5.47** As near to the outer limits of the channel or fairway which lies on her starboard side as is safe and practicable.

- 5.48** Handover should be postponed when the ship is, or is about to be, engaged in a collision avoidance manoeuvre or a navigational alteration of course.
- 5.49** He is in distress and requires assistance (Annex IV).
- 5.50** The vessel is in distress and requires assistance (Annex IV).
- 5.51** It is a signal to indicate a vessel in distress and requires assistance (Annex IV).
- 5.52** In respect of local regulations rule 1 states that:
Nothing in these rules shall interfere with the operation of special rules made by an appropriate authority for roadsteads, harbours, rivers, lakes or inland waterways connected with the high seas and navigable by seagoing vessels.
Such special rules shall conform as closely as possible to these rules.
- 5.53** The word 'vessel' includes every description of water craft, including non-displacement craft, WIG craft and seaplanes, used or capable of being used as a means of transportation on water.
- 5.54** The term 'vessel engaged in fishing' means any vessel fishing with nets, lines, trawls or other fishing apparatus which restrict manoeuvrability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict manoeuvrability.
- 5.55** The term 'sailing vessel' means any vessel under sail provided that propelling machinery, if fitted, is not being used.
- 5.56** The term 'power-driven vessel' means any vessel propelled by machinery.
- 5.57** A small vessel fishing by hand line with a simple string of four or six mackerel feathers (such as the emergency fishing kit in

a lifeboat) would be considered as using trolling lines. A vessel fishing with rods would be classed as 'other fishing apparatus which does not restrict manoeuvrability'.

- 5.58** The term 'underway' means that a vessel is not at anchor or made fast to the shore or aground.
- 5.59** The term 'vessel constrained by her draught' means a power-driven vessel which, because of her draught in relation to the available depth and width of navigable water, is severely restricted in her ability to deviate from the course she is following.
- 5.60** The vessel is restricted in her ability to manoeuvre as she is engaged in replenishment, transferring persons, provisions or cargo whilst underway and would therefore exhibit red/white/red lights in a vertical line by night and ball/diamond/ball by day to indicate her special condition.
- 5.61** The term shall include but not be limited to:
- A vessel engaged in laying servicing or picking up a navigation mark, submarine cable or pipeline
 - a vessel engaged in dredging, surveying or underwater operations
 - a vessel engaged in replenishment or transferring persons, provisions or cargo while underway
 - a vessel engaged in the launching or recovery of aircraft
 - a vessel engaged in mine clearance operations
 - a vessel engaged in a towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course.
- 5.62** The term 'vessel restricted in her ability to manoeuvre' means a vessel which, from the nature of her work, is restricted in her ability to manoeuvre as required by these rules and is therefore unable to keep out of the way of another vessel.

- 5.63** The term 'not under command' refers to a vessel which, through some exceptional circumstance, is unable to manoeuvre as required by these rules and is therefore unable to keep out of the way of another vessel.
- 5.64** The term 'seaplane' includes any aircraft designed to manoeuvre on the water.
- 5.65** Overtaking (in a narrow channel or fairway) can take place only if the vessel to be overtaken has to take action to permit safe passing, the vessel intending to overtake shall indicate her intention by sounding:
- Two prolonged blasts followed by one short blast, to indicate I wish to overtake you on your starboard side, or
 - two prolonged blasts followed by two short blasts, indicating I wish to overtake you on your port side.

The vessel to be overtaken shall sound one prolonged blast followed by one short blast followed by one prolonged blast and one short blast if in agreement and take action to permit safe passing. If in disagreement, shall sound five or more short and rapid blasts.

- 5.66** A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.
- 5.67** A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.
- 5.68** A vessel of less than 20 metres in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway. Additionally, a vessel engaged in fishing shall not impede the passage of any vessel navigating within a narrow channel or fairway.
- 5.69** A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel

or fairway which lies on her starboard side as is safe and practicable.

- 5.70** That the action you have taken to avoid collision is having the desired effect and it shall be carefully monitored until the other vessel is finally past and clear.
- 5.71** When shooting or hauling their nets or when the nets have come fast upon an obstruction the lights as prescribed in Annex II.
- 5.72** 300 mm.
- 5.73** They may be sounded simultaneously if they are less than 100 metres apart.
- 5.74** 1 nm
- 5.75** 1.5 nm
- 5.76** 2 nm
- 5.77** When greater than 20 m length fishing vessels shall exhibit the following:
- When shooting their nets:
 - By night: two white lights in a vertical line
 - by day: Code flag 'Z'
 - When hauling their nets:
 - By night: one white light over one red light in a vertical line
 - by day: Code flag 'G'
 - When their nets have come-fast upon an obstruction:
 - By night: two red lights in a vertical line
 - by day: Code flag 'P'.
- 5.78** They shall be at least 0.9 metres apart at a lower level than the lights prescribed in Rule 26 for fishing vessels. The lights shall be visible all round the horizon at a distance of at least one mile but at a lesser distance than the lights prescribed in the Rules for fishing vessels.

- 5.79** A manoeuvring light shall be placed in the same fore and aft vertical plane as the masthead light or lights and where practicable, at a minimum height of two metres vertically above the forward masthead light, provided that it shall be carried not less than two metres vertically above or below the after masthead light.

On a vessel where only one masthead light is carried the manoeuvring light, if fitted, shall be carried where it can best be seen, not less than two metres vertically apart from the masthead light.

- 5.80** The required minimum intensity is maintained at all angles from 5 degrees above to 5 degrees below the horizontal and that at least 50% of the required minimum intensity is maintained from 25 degrees above to 25 degrees below the horizontal.
- 5.81** The minimum intensity is maintained at all angles from 5 degrees above to 5 degrees below the horizontal. In addition at least 60% of the required minimum intensity is maintained from 7.5 degrees above to 7.5 degrees below the horizontal.
- 5.82** All-round lights shall be so located as not to be obscured by masts, topmasts or structures within angular sectors of not more than 6 degrees, except anchor lights prescribed in Rule 30, which need not be placed at an impracticable height above the hull.
- 5.83** In the forward direction, sidelights as fitted on the vessel shall show the minimum required intensities. The intensities shall decrease to reach practical cut-off between 1 degree and 3 degrees outside the prescribed sectors.

At 22.5 degrees abaft the beam the minimum required intensities shall be maintained over the arc of the horizon up to 5 degrees within the limits of the sectors prescribed in Rule 21. From 25 degrees within the prescribed sectors the intensity may decrease by 50% up to the prescribed limits. It shall decrease steadily

to reach practical cut-off not more than 5 degrees outside the prescribed sector.

- 5.84** In a vessel of less than 20 metres in length, shapes of lesser dimensions but commensurate with the size of vessel may be used and the distance apart correspondingly reduced.
- 5.85** At least 1.5 metres.
- 5.86** A diamond shape shall consist of two cones each having a common base of diameter of not less than 0.6 metres.
- 5.87** A cylinder shall have a diameter of at least 0.6 metres and a height equal to twice its diameter.
- 5.88** A cone should have a base diameter of not less than 0.6 metres and a height equal to its diameter.
- 5.89** It should have a diameter not less than 0.6 metres.
- 5.90** These all-round lights shall be placed at a horizontal distance of not less than two metres from the fore and aft centreline of the vessel in the athwartship direction.
- 5.91** When two masthead lights are prescribed for a vessel, the horizontal distance between them shall not be less than one half of the length of the vessel but need not be more than 100 metres. The forward light shall be placed not more than 100 metres. The forward light shall be placed not more than one quarter of the length of the vessel from the stem.
- 5.92** Such lights shall be spaced not less than 2 metres apart, and the lowest of these lights shall, except where a towing light is required, be placed at a height of not less than 4 metres above the hull.
- 5.93** The sidelights of a power-driven vessel shall be placed at a height above the hull not greater than three quarters of that of the forward masthead light. They shall not be so low as to be interfered with by deck lights.

- 5.94** The requirements are as follows:
- When two masthead lights are carried the after one shall be at least 4.5 metres vertically higher than the forward one
 - the vertical separation of the masthead lights of power-driven vessels shall be such that in all normal conditions of trim the after light will be seen over and separate from the forward light at a distance of 1,000 metres from the stern when viewed at sea level.
- 5.95** The forward masthead light, or if only one masthead light is carried then that light, shall be carried at a height above the hull of not less than 6 metres, being at a height above the hull not less than such breadth, so however that the light need not be placed at a greater height above the hull than 12 metres.
- 5.96** The term 'height above the hull' means height above the uppermost continuous deck. This height shall be measured from the position vertically beneath the location of the light.
- 5.97** Four short blasts.
- 5.98** One prolonged blast followed by two short blasts.
- 5.99** A vessel not under command, a vessel constrained by her draught, a sailing vessel, a vessel engaged in fishing and a vessel engaged in towing or pushing shall sound this signal.
- 5.100** At intervals of not more than two minutes, two prolonged blasts in succession with an interval of about two seconds between them.
- 5.101** She shall sound, at intervals of not more than 2 minutes, one prolonged blast.
- 5.102** No, if whistles are fitted at a distance apart of more than 100 metres, one whistle only shall be used for giving manoeuvring and warning signals.

- 5.103** 5 miles.
- 5.104** Three short blasts.
- 5.105** Two short blasts.
- 5.106** One short blast.
- 5.107** The term 'prolonged blast' means a blast of from four to six seconds' duration on the ships sound signalling appliance.
- 5.108** The term 'short blast' means a blast of about one second's duration.
- 5.109** The word 'whistle' means any sound signalling appliance capable of producing the prescribed blasts and which complies with the specifications in Annex III of the collision regulations.
- 5.110** Vessels of more than 100 metres in length are required to illuminate their decks.
- 5.111** In the event of a blackout:
- Advise the Master
 - call the officer or bosun and send them forward
 - continue steering using the auxiliary system
 - display NUC symbols (lights on emergency/24v power).
- 5.112** In the event of steering failure:
- Switch on the other steering motor
 - call the Master/engine room
 - if the other steering motor has no effect, stop engines/bring vessel to a halt and display the NUC signal.
- 5.113** Question the officer being relieved I am relieving and, if not satisfied, call the Master and ask for clarification.
- 5.114** She shall exhibit the lights or shapes prescribed for a similar vessel of her length.

- 5.115** A rigid replica of the International Code Flag 'A' not less than 1 metre in height. Measures shall be taken to ensure its all-round visibility.
- 5.116** She shall exhibit only the lights and shapes prescribed in Rule 26 for fishing vessels.
- 5.117** She should exhibit forward, where it can best be seen, a conical shape apex downwards.
- 5.118** A vessel under oars may exhibit the lights prescribed for a sailing vessel, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.
- 5.119** She may exhibit the lights prescribed in rule 25 for sailing vessels, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.
- 5.120** She may, in addition, exhibit at or near the top of the mast, where they can best be seen, two all-round white lights in a vertical line, the upper being red and the lower being green, but these lights shall not be exhibited in conjunction with the combined lantern which may be permitted on sailing vessels less than 20 metres in length.
- 5.121** A sailing vessel of less than 20 metres in length.
- 5.122** It should have an all-round white light at or near the forward and after end of the object being towed, a white light at the extremities of her breadth, and with additional lights placed between the lights so that the distance between any light does not exceed 100 metres.
- 5.123** One all-round white light at or near the forward and after end and two additional white lights at or near the extremities of its breadth.

- 5.124** If it is less than 25 metres in breadth, one all-round white light at or near the forward end and one at or near the after end except that dracones need not exhibit a light at or near the forward end.
- 5.125** An inconspicuous, partly submerged vessel or object should be lit as follows:
- If it is less than 25 metres in breadth, one all-round white light at or near the forward end except that dracones need not exhibit a light at or near the forward end
 - if it is 25 metres or more in breadth, two additional all-round white lights at or near the extremities of its breadth
 - if it exceeds 100 metres in length, additional all-round white lights between the lights prescribed in sub-paragraphs i) and ii) so that the distance between the lights shall not exceed 100 metres.
- 5.126** They should be lit as one vessel.
- 5.127** They should be lit as a power-driven vessel.
- 5.128** The towing vessel and the tow would both exhibit a diamond shape where it can best be seen.
- 5.129** The masthead light or all-round white light on a power-driven vessel of less than 12 metres in length may be displaced from the fore and aft centreline of the vessel if centreline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried as nearly as practicable in the same fore and aft line as the masthead light or the all-round white light.
- A frequent example of this may be seen on small fishing vessels/ lobster boats fitted with an offset wheelhouse.
- 5.130** The vessel shall exhibit all-round white light and if practicable, exhibit sidelights.

- 5.131** An all-round white light and sidelights may be exhibited in lieu of the lights described.
- 5.132** When operating in the non-displacement mode.
- 5.133** 3 miles.
- 5.134** The minimum visibility is:
- Masthead light - 2 miles
 - sidelight - 1 mile
 - sternlight - 2 miles
 - towing light - 2 miles
 - all-round light - 2 miles.
- 5.135** 2 miles.
- 5.136** 2 miles.
- 5.137** 2 miles.
- 5.138** 2 miles.
- 5.139** 3 miles.
- 5.140** 5 miles.
- 5.141** The minimum visibility of the lights are as follows:
- Masthead light - 5 miles, except that where the length of the vessel is less than 20 metres - 3 miles
 - sidelight - 2 miles
 - sternlight - 2 miles
 - towing light - 2 miles
 - all-round light - 2 miles.
- 5.142** The visibility of lights on a vessel of 50m or more are:
- Masthead light - 6 miles
 - sidelight - 3 miles

- sternlight - 3 miles
- towing light - 3 miles
- all-round light - 3 miles.

5.143 'Flashing light' means a light flashing at regular intervals at a frequency of 120 flashes or more per minute.

5.144 'All-round light' means a light showing an unbroken light over an arc of the horizon of 360 degrees.

5.145 'Towing light' means a yellow light having the same characteristics as a sternlight.

5.146 'Sternlight' means a white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right aft on each side of the vessel.

5.147 'Sidelights' means a green light on the starboard side and a red light on the port side each showing an unbroken light over an arc of the horizon of 112.5 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side. In a vessel of less than 20 metres in length, the sidelights may be combined in one lantern carried on the fore and aft centreline of the vessel.

5.148 'Masthead light' means a white light placed over the fore and aft centreline of the vessel showing an unbroken light over an arc of the horizon of 225 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on either side of the vessel.

5.149 The rules concerning lights shall be complied with from sunset to sunrise and, during such times, no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper lookout.

5.150 Rule 19.

- a) The rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.
- b) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.
- c) Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with the rules of section 1 of this part (ie rules 5 - 10 which apply in any condition of visibility).
- d) A vessel which detects, by radar alone, the presence of another vessel shall determine if a close-quarters situation is developing and/or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:
 - i) an alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken;
 - ii) an alteration of course towards a vessel abeam or abaft the beam.
- e) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forward of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on her course. She shall, if necessary, take all her way off and in any event navigate with extreme caution until danger of collision is over.

- 5.151** A seaplane on the water shall, in general, keep well clear of all vessels and avoid impeding their navigation. In circumstances, however, where risk of collision exists, she shall comply with the rules of this part.

- 5.152** She should navigate with particular caution having full regard to her special condition.
- 5.153** Any vessel other than a vessel not under command or a vessel restricted in her ability to manoeuvre should avoid impeding the passage of a vessel constrained by her draught.
- 5.154** A fishing vessel should keep out of the way of:
- A vessel not under command
 - a vessel restricted in her ability to manoeuvre.
- 5.155** A sailing vessel should keep out of the way of:
- A vessel not under command
 - a vessel restricted in her ability to manoeuvre
 - a vessel engaged in fishing.
- 5.156** A power driven vessel underway should keep out of the way of:
- A vessel not under command
 - a vessel restricted in her ability to manoeuvre
 - a vessel engaged in fishing
 - a sailing vessel.
- 5.157** Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.
- 5.158** A head-on situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she could see the masthead lights of the other in a line or nearly in a line and/or both sidelights and by day she observes the corresponding aspect of the other vessel.
- 5.159** A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22.5 degrees abaft her beam, that is in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the sternlight of that vessel but neither of her sidelights.

- 5.160** These rules shall apply to all vessels upon the high seas and in all waters connected therewith navigable by seagoing vessels.
- 5.161** The term 'Wing-In-Ground (WIG) craft' means a multi-modal craft which, in its main operational mode, flies in close proximity to the surface by utilising surface-effect action.

6 Colregs Rule 10: Traffic Separation Scheme

- 6.1** Yes, if essential as it would be considered a seamanlike manoeuvre.
- 6.2** Yes, as it would be considered a seamanlike manoeuvre.
- 6.3** A vessel is using a scheme, within the meaning of Rule 10, when she is navigating within the limits of the scheme and is not crossing the lanes, nor engaged in fishing within the separation zone.
- 6.4** No, a vessel using an ITZ is not using the scheme.
- 6.5** A fishing vessel is not exempted from Rule 10, although she is allowed to fish whilst proceeding in the general direction of traffic flow for that lane.
- 6.6** Each vessel is required to alter course to starboard under Rule 14 and should navigate with particular caution.

Such a situation may now result in further meeting situations for both vessels, making it difficult to return to their original track. It is advised not to navigate near the extremity of a traffic lane for this reason.

- 6.7** The rules from Part B, although small vessels and sailing vessels have a general obligation to avoid impeding the safe passage of a PDV, following the lane.
- 6.8** Sound one short blast and alter course to starboard as per Rule 15, alternatively reduce speed.
- 6.9** If there are special circumstances such as the need to keep clear of another vessel. A sailing vessel may be unable to cross at right angles due to the direction of the wind.

- 6.10** A vessel may use an ITZ when en-route to or from an offshore installation or structure, pilot station or any other place situated within the ITZ, or to avoid immediate danger.
- 6.11** No. Through traffic is permitted to proceed in either direction in open water outside the area covered by the scheme, provided the outer limits of the scheme are avoided by as wide a margin as practicable.
- 6.12** Defined in the IMO Ships' Routeing Guide as a route in a designated area within definite limits which has been accurately surveyed for clearance of sea bottom and submerged obstacles as indicated on the chart.
- 6.13** Yes, as the route is covered by the TSS.
- 6.14** Sound one short blast and alter course to starboard as per Rule 15, keeping well clear or, alternatively, reduce speed.
- 6.15** 'A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane'. You are not using a traffic lane but crossing, therefore you are required to keep out of the way – Rule 18.
- 6.16** You should take the following actions:
- Stand on with caution
 - a sailing vessel shall 'not impede' the safe passage of a vessel following a traffic lane
 - should the sailing vessel continue to take no action, Rule 10 does not relieve me of my obligation under any other rule, so I would sound one short blast and alter course to starboard.
- 6.17** Although a vessel engaged in fishing is not to impede the passage of any vessel following a traffic lane, under Rule 13, You are required to keep clear.
- 6.18** Traffic Separation Schemes adopted by the International Maritime Organisation and listed in their publication 'Ships' Routing'.

- 6.19** You should take the following action:
- Stand on with caution
 - a vessel of less than 20 metres in length shall 'not impede' the safe passage of a vessel following a traffic lane
 - should the PDV continue on, taking no action, Rule 10 does not relieve me of my obligation under any other rule, so I would sound one short blast and alter course to starboard.
- 6.20** A vessel using a traffic separation scheme shall:
- Proceed in the appropriate traffic lane in the general traffic flow for that lane
 - so far as practicable keep clear of traffic separation line or separation zone
 - normally join or leave a traffic lane at the termination of the lane, but when joining or leaving from either side shall do so at as small an angle to the general direction of traffic flow as practicable.
- 6.21** A vessel shall, so far as practicable, avoid crossing traffic lanes, but if obliged to do so shall cross on a heading as nearly as practicable at right angles to the general direction of traffic flow.
- 6.22** A vessel other than a crossing vessel or a vessel joining or leaving a lane shall not normally enter a separation zone or cross a separation line except:
- i) In cases of emergency to avoid immediate danger
 - ii) to engage in fishing within a separation zone.
- 6.23** A vessel navigating in areas near the termination of a traffic separation scheme shall do so with 'particular caution'.
- 6.24** A vessel shall so far as practicable avoid anchoring in a traffic separation scheme or in areas near its termination. Although there are situations, where it would be considered good seamanship to anchor in a TSS, such as on the breakdown of main engines or if proceeding in a traffic lane with reduced visibility and the radar malfunctioned.

- 6.25** A vessel not using a traffic separation scheme shall avoid it by as wide a margin as practicable.
- 6.26** She should proceed in the general direction of traffic flow for that lane and not impede the passage of any vessel following a traffic lane.
- 6.27** A vessel engaged in fishing, a vessel less than 20 metres in length or a sailing vessel should not impede the safe passage of a vessel following a traffic lane.
- 6.28** A vessel restricted in her ability to manoeuvre when in engaged in an operation for the maintenance of safety navigation, or a vessel engaged in an operation for the laying, servicing or picking up of a submarine cable or pipeline is exempted from complying with Rule 10 to the extent necessary to carry out the operation.
- 6.29** Details of IMO adopted schemes are given in the IMO publication 'Ships' Routeing' and are listed in Chapter 17 of the Annual Summary of 'Notices to Mariners'.
- 6.30** It is a routeing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes, particulars of which can be found in IMO's 'Ships' Routeing Guide.'
- 6.31** Normally at the termination of the lane, but a ship may leave from either side at as small an angle to the general direction of traffic flow as practicable.
- 6.32** When crossing, joining or leaving a lane, to engage in fishing within a separation zone or in cases of emergency to avoid immediate danger.
- 6.33** Initially stand-on. "A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane".

However, Rule 10 does not relieve you of your obligation under any other Rules, so should the vessel continue on, sound one short blast and alter course to starboard.

6.34 You must keep out of the way.

Rule 10 (j) - 'A vessel of less than 20 metres in length or a sailing vessel shall not impede the safe passage of a power-driven vessel following a traffic lane.'

Own vessel is not following a traffic lane but crossing one and therefore has no right of way under Rule 10.

6.35 You should keep clear as own vessel is not following a traffic lane, responsibility between vessels (Rule 18) prevails here.

7 Colregs Rule 19: Navigation in Restricted Visibility

7.1 It depends on the type of ship, stopping power and traffic in the vicinity. Often if visibility is less than 5 miles, it would be prudent to have the engines on standby as fog can develop rapidly.

7.2 Although the Rules do not state a minimum, the audible range of a fog signal on a vessel greater than 200 metres in length is two miles and you do not want to hear another vessel's signal. So, allowing for a margin of error in plotting, aim to pass at a minimum of three miles.

It may also be considered that distances of less than two miles may be considered sufficient when proceeding at a reduced speed in congested waters, when in an overtaking situation or when a vessel is expected to pass astern.

7.3 I would take avoiding action 'early' so as to relieve the other vessel of her obligation of keeping out of the way and avoid the possibility of her making a conflicting manoeuvre.

7.4 When overtaking, or to avoid a vessel approaching from right astern to abaft the starboard beam.

7.5 Vessels approaching from the beam.

7.6 Although reductions are to be made for fog signals from forward of the beam, directions of sound cannot be relied upon. It would be good seamanship to reduce speed when signals were heard 'apparently' abaft the beam on an approximate steady bearing.

7.7 Reduce speed and allow the other vessel to draw ahead. Although a delay in the reduction of speed may not be readily observed on radar, so an alteration of course 60 degrees to port is a safe manoeuvre.

- 7.8** Caution in using astern propulsion as transverse thrust may slew your vessel across the path of the oncoming vessel.
- 7.9** Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate manoeuvre.
- 7.10** A vessel which detects by radar alone the presence of another vessel shall determine by plotting if a close quarters situation is developing and/or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:
- i) An alteration of course to port for a vessel forward of the beam, other than for a vessel being overtaken
 - ii) an alteration of course towards a vessel abeam or abaft the beam.
- 7.11** Every vessel which hears apparently forward of her beam the fog signal of another vessel, shall reduce her speed to the minimum at which she can be kept on her course. She shall if necessary take all her way off and in any event navigate with extreme caution until danger of collision is over.
- 7.12** Reduce speed to the minimum at which own vessel can be kept on course and shall, if necessary, take all way off, and in any event navigate with extreme caution until danger of collision is over.
- 7.13** When she is stopped and making no way through the water.
- 7.14** Preferably in the order of 60 - 90 degrees.
- 7.15** If engaged in fishing she shall sound, at intervals of no more than two minutes, one prolonged blast followed by two short blasts.
- 7.16** The appropriate signal for a vessel of her length.

- 7.17** One prolonged blast followed by two short blasts.
- 7.18** By sounding three blasts in succession, namely one short, one prolonged followed by one short blast.
- 7.19** The same signal as a power-driven vessel of equal length, but she may, in addition, sound an identity signal consisting of four short blasts.

8 Colregs Class 2 (Ch. Mate)

- 8.1** The following are distress signals from Annex IV:
- A gun or other explosive signal fired at intervals of about one minute
 - a continuous sounding with any fog signalling apparatus
 - rockets or shells throwing red stars fired one at a time at short intervals
 - a signal made consisting of SOS in Morse Code
 - the spoken word 'MAYDAY'
 - the international code signal 'NC'
 - a signal consisting of a square flag having above or below it a ball or anything resembling a ball
 - a rocket parachute flare or a hand flare showing a red light
 - a smoke signal giving off orange coloured smoke
 - slowly and repeatedly raising and lowering outstretched arms
 - radiotelephone/telegraph alarm signal
 - signal transmitted by EPIRB
 - approved signals transmitted by radio communication equipment, including survival craft RADAR transponders.
- 8.2** An all-weather lifeboat of the RNLI, the UK's Royal National Lifeboat Institution.
- 8.3** If necessary to attract the attention of another vessel, any vessel may make light or sound signals that cannot be mistaken for any signal authorised elsewhere in these rules, or may direct the beam of her searchlight in the direction of the danger, in such a way as not to embarrass any vessel. Any light to attract the attention of another vessel shall be such that it cannot be mistaken for any aid to navigation. For the purpose of this rule, the use of high intensity lights such as strobe lights shall be avoided.
- 8.4** The same as for a PDV but may also sound an identity signal consisting of four short blasts.

- 8.5** Stand on with caution.
- 8.6** Stand on with caution.
- 8.7** Maintain course and speed and closely monitor the situation.
- 8.8** Initially maintain course and speed, and closely monitor the situation.

Rule 10 (j) '.... a sailing vessel shall not impede the safe passage of a power driven vessel following a traffic lane'.

Should the sailing vessel fail to take action to avoid collision, sound one short blast and alter course to starboard as you are not relieved of your obligation under any other rule.

- 8.9** Maintain course closely monitor the situation.

Rule 10 (j) 'A vessel of less than 20 metres in length..... shall not impede the safe passage of a power driven vessel following a traffic lane'.

If the PDV of < 20 metres fails to take action, sound one short blast and alter course to starboard.

- 8.10** Keep out of the way as own vessel is not following a traffic lane and therefore has no privilege under Rule 10.
- 8.11** Own vessel to keep out of the way as you are not following a traffic lane.
- 8.12** Stand on, "A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane".

Should the fishing vessel continue on, sound one short blast and alter course to starboard.

- 8.13** A separation zone can be entered in cases of emergency to avoid immediate danger, or to engage in fishing within a separation zone, or when crossing, joining or leaving a lane.

- 3.14** Sound one short blast and make a bold alteration to starboard, or slow down.
- 3.15** It is the fog signal of a Pilot vessel under way giving an additional identity signal of four short blasts.
- 3.16** Keep a vigilant watch for Pilot vessels in the area, instructing lookouts to do the same.

Reduce speed to prevent wash swamping smaller vessels, recording the reduction in the logbook.

Advise the Pilot station on the appropriate VHF channel that you are passing through and do not require a Pilot.

- 3.17** The following signals may be exhibited:
- 'U' = You are running in to danger
 - 'L' = You should stop your vessel instantly.
- 3.18** The stand on vessel is obliged to:
- Maintain course & speed
 - when, from any cause, the stand on vessel finds herself so close that collision cannot be avoided by the action of the give way vessel, she shall take such action as will best avoid collision.
- 3.19** A submarine may indicate its position by releasing a buoy, oil, air, candles (yellow or red flare, or white smoke).
- 3.20** You should:
- Note the position
 - lookout for submarine buoys
 - inform the Navy, Police and/or Coastguard
 - stand by with boats ready for assistance
 - indicate to the submarine that help is at hand by stopping/ starting engine, banging on the hull or starting/ stopping the Echo-Sounder.

- 8.21** The NUC vessel should keep clear way as any vessel overtaking any other, shall keep out of the way of the vessel being overtaken. Therefore you should stand on with caution taking into consideration the potential nature of her condition and actions that may be required.
- 8.22** If a target is detected at such close range stop the vessel and take all way off to allow more time to assess the situation. Carry out a radar plot to make a full assessment of the risk of collision. Do not take any other action until the track of the target is determined. Rule 7C states that "Assumptions shall not be made on the basis of scanty information especially scanty radar information."
- 8.23** Sidelights and a sternlight.
- 8.24** To remove an air bubble from a liquid card magnetic compass turn it upside down, undo the cap and add a clear alcoholic spirit such as gin. Do not add surgical spirit as it will cloud the fluid.
- 8.25** You must be aware of the danger of using astern propulsion, as transverse thrust may slew the vessel across the path of an oncoming vessel.

9 Colregs Class 1 (Master)

9.1 If there is no response from the engines you would:

- Notify the pilot
- re-ring the order on the telegraph
- OOW should be ordered to contact the engine room
- prepare to use anchors and emergency stop procedure
- exhibit NUC signals.

9.2 The following actions should be taken:

- Order stand-by engines
- obtain position of own vessel
- establish whether the buoy is adrift or attached to the submarine
- obtain depth
- refer to the annual summary of NTM's section on submerged submarines
- pass information to the coast radio station/coastguard
- keep engines rotating
- switch on/off echo sounder and have a man stationed in bottom plates of engine room to hammer on shell plate (this will advise the submarine that the buoy has been sighted)
- prepare emergency boat in case of persons escaping from submarine (only normally applicable in shallow water, eg 30 metres).
- update shore authorities
- at night, rig and operate the ships searchlights.

9.3 No, as the signal described is a warning signal for conditions of restricted visibility. As visibility is not restricted, sound at least 5 or more short and rapid blasts.

9.4 Bridge composition should consider:

- That at no time will the bridge be left unattended
- traffic conditions

- weather conditions, visibility and whether daylight or darkness
- the proximity of navigational hazards which may make it necessary for the OOW to carry out additional navigational duties
- the use and operational condition of navigational aids such as radar or electronic position indicating devices and any other equipment affecting the safe navigation of the ship
- whether the ship is fitted with automatic steering
- whether there are radio duties to be performed
- any unusual demands on the navigational watch that may arise as a result of special operational circumstances
- fatigue
- knowledge and experience of the officers.

9.5 In the event of an imminent and unavoidable collision the:

- Main concern is to reduce the effect of collision as much as possible; damage will be more serious if vessel is struck at mid-length
- engines should be stopped and rudder applied to achieve a glancing blow if possible forward, due to the added stiffening/collision bulkhead.

9.6 Engines must be ready for immediate manoeuvre and the ship is not awarded any special privilege, therefore sound 1 short blast and alter course to starboard.

9.7 Although reductions are to be made for fog signals heard apparently forward of the beam, directions of sound cannot be relied upon. It would be good seamanship to reduce speed when several signals are heard abaft the beam on an 'approximate' steady bearing.

9.8 You should:

- Stop own vessel
- check own position on the chart and the position of the vessel aground

- ensure the echo sounder is operating
- communicate with the vessel aground, obtaining the:
 - time she grounded
 - draught of the vessel.
- find an alternative route taking the vessel clear of any dangers.

9.9 You should:

- Stop own vessel or reduce speed
- contact the minesweeper and obtain the following information:
 - is the minesweeper engaged in an exercise or actual minesweeping?
 - what clear navigational tracks are there that can be followed?
 - which areas are obstructed by mines?
- the minesweeper is to be given wide berth of 'at least' 1000 metres.

9.10 Submarines are fitted with a yellow/amber flashing light, flashing at a rate of between 90 - 105 flashes per minute. A similar light is exhibited on a hovercraft flashing at 120 flashes per minute.

9.11 The vessel has indicated a danger by using a signal to attract attention, by directing her searchlight in the direction of a danger. (Rule 36).

A full assessment of the situation is needed:

- Take all way off
- plot position on chart
- compare position against known charted hazards
- establish communication with the dredger
- take appropriate action to avoid the area.

9.12 In addition to the normal fog signal, a vessel at anchor may sound three blasts on her whistle to give warning of her position, namely one short, one prolonged followed by one short blast.

9.13 The following action would be prudent:

- Assess the situation, taking into account navigational hazards in the proximity and other traffic
- check the plot on the radar
- in the event of the situation continuing to develop, sound the wake up signal - 5 or more short and rapid blasts on the ship's whistle supplemented by flashing light, to indicate doubt as to the intention of the crossing vessel
- at this stage if no action is being taken by the crossing vessel, I would carry out the following:
 - sound one short blast on ship's whistle followed by a broad alteration of course to starboard and or
 - take all way off my vessel immediately.

9.14 The vessel astern has sounded the whistle signal to indicate that she intends to overtake on my port side. If in agreement I would sound one prolonged, one short, one prolonged, one short blast and take steps to permit safe passing.

If in disagreement, I would sound five or more short and rapid blasts on the ship's whistle.

9.15 It is dangerous to follow close inshore leads, particularly when the wind is blowing onshore. The assistance of an ice breaker may not be available in time, particularly if your vessel is perilously close to the shore.

9.16 If the ice is moving there is the strong possibility of breaking the anchor cable.

9.17 For an OOW to stand the watch alone consider the following:

- Merchant Shipping (Certification & Watchkeeping) Regulations
- STCW'95
- situation regarding weather, visibility, traffic, proximity of dangers of navigation

- assistance necessary when in coastal waters/entering TSS
- convey to a young officer that assistance is available immediately.

9.18 Take the following action:

- Sound the wake-up signal, repeating as necessary
- if no action is taken by the other vessel take avoiding action, altering away from her to a diverging course sounding two short blasts.

9.19 Sound the wake-up signal, repeated as necessary. If she takes no action alter away from the vessel to starboard to a diverging course, sounding one short blast.

9.20 If assuming the officer on watch had already given the other vessel the wake-up signal before calling to the bridge, sound one short blast and turn to starboard until the other vessel is abaft the port beam.

9.21 VQ Fl Yellow/Amber light between 90 - 105 flashes per minute located 1 - 2 metres above the water. Not to be confused with that of a hovercraft.

