

Lesson Plan – 4.1-2 IRPCS	Date: 03/03/18 Mark Harker owes LAT / Helm

AIM:

To give crew a practical and theoretical understanding of IRPCS International Regulation Prevention of Collision at Sea

Training Afloat –

- Sto)

Training Shoreside –

- IRPCS - 2 Responsibility , 5 Look out , 6 Safe Speed, 7 Risk of Collision , 10 Traffic Separation Scheme , 19 Conduct of vessel in restricted visibility
- Buoyage

IRPCS:

2, Responsibility - (a) Nothing in these rules shall exonerate any vessel, or the owner, master or crew thereof, from the consequences of any neglect to comply with these rules or of the neglect of any precautions which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

5, Look out - Every vessel shall at all times maintain a proper look-out by sight and hearing as well as to make a full appraisal of the situation and or the risk of collision.

6, safe Speed - every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid a collision and be stopped within a distance appropriate to the prevailing circumstances and conditions.

In determining a safe speed the following factors shall be among those taken in to account:

(a) By all vessels.

(i) the state of visibility;

(ii) the traffic density including concentrations of fishing vessels or any other vessels;

(iii) the manoeuvrability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;

(iv) at night the presence of background light such as from shore lights or from back scatter of her own lights;

(v) the state of wind, sea and current, and the proximity of navigational hazards;

(vi) the draught in relation to the available depth of water.

(b) Additionally, by vessels with operational radar:

(i) the characteristics, efficiency and limitations of the radar equipment;

(ii) any constraints imposed by the radar range scale in use;

(iii) the effect on radar detection of the sea state, weather and other sources of interference;

(iv) the possibility that small vessels, ice and other large floating objects may not be detected by radar at an adequate range;

(v) the number, location and movements of vessels detected by radar;

(vi) the more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity

7, risk of Collision -

(a) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.

(b) Proper use shall be made of radar equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observations of detected objects.

(c) Assumptions shall not be made on the basis of scanty information, especially scanty radar information.

(d) In determining if risk of collision exists the following considerations shall be among those taken into account.

(i) such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change.

(ii) such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.

10, traffic Separation Scheme - (a) This rule applies to traffic separation schemes adopted by the organisation and does not relieve any vessel of her obligation under any other Rule:

(b) A vessel using a traffic separation scheme shall:

(i) proceed in the appropriate traffic lane in the general direction of traffic flow for that lane;

(ii) so far as practicable keep clear of a traffic separation line or separation zone;

(iii) 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.

(c) 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.

(d)

(i) Inshore traffic zones shall not normally be used by through traffic which can safely use the appropriate traffic lane within the adjacent traffic separation scheme. However, vessels of less than 20m in length, sailing vessels and vessels engaged in fishing may under all circumstances use inshore traffic zones

(ii) Notwithstanding subparagraph (d) (i), a vessel may use an inshore traffic zone when en route to or from a port, offshore installation or structure, pilot station or any other place situated within the inshore traffic zone, or to avoid immediate danger.

(e) 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 the separation zone.

(f) A vessel navigating in areas near the terminations of traffic separation schemes shall do so with particular caution.

(g) A vessel shall as far as practicable avoid anchoring in a traffic separation scheme or in areas near its terminations.

(h) A vessel not using a traffic separation scheme shall avoid it by as wide a margin as practicable.

(i) A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane.

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

(k) A vessel restricted in her ability to manoeuvre when engaged in an operation for the maintenance of safety of navigation in a traffic separation scheme is exempted from complying with this rule to the extent necessary to carry out the operation.

(l) A vessel restricted in her ability to manoeuvre when engaged in an operation for the laying, servicing or picking up of a submarine cable, within a traffic separation scheme, is exempted from complying with this Rule to the extent necessary to carry out the operation

7, Risk of Collision - (a) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there as any doubt such risk shall be deemed to exist.

(i) such risk shall be deemed to exist it the compass bearing of an approaching vessel does not appreciably change.

(ii) such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.

19 Conduct of vessels in restricted visibility -

(a) This 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 I of this Part.

(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 forwards of the beam, other than for a vessel being overtaken.

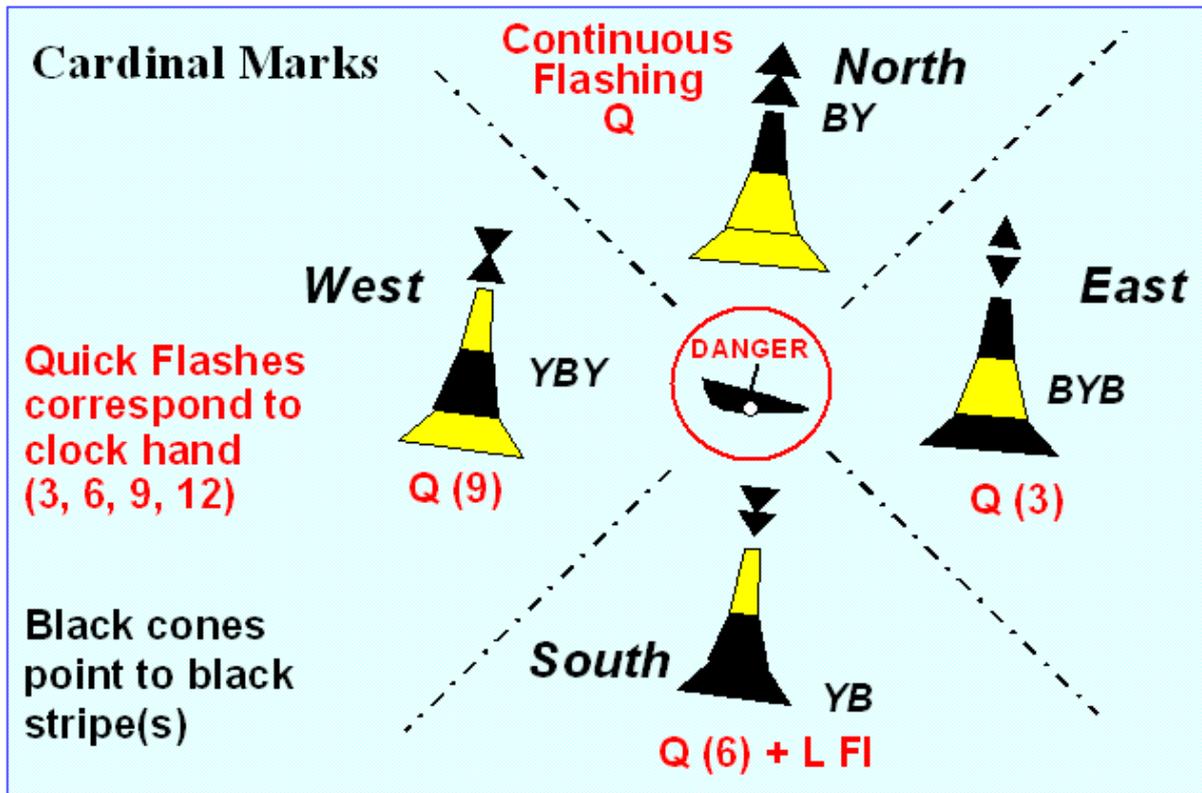
(ii) an alteration of course towards a vessel abeam or abaft the beam.

(e) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forwards of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forwards 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.

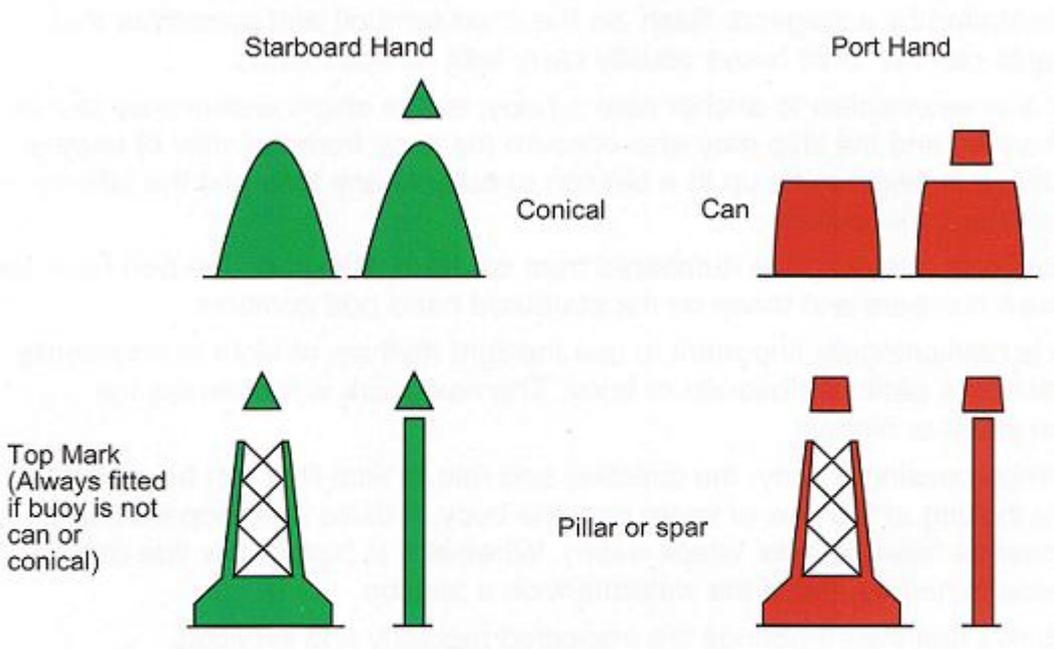
Buoyage:

Learn the colour of the buoyage, light sequence , purpose and how to identify them at day or at night.

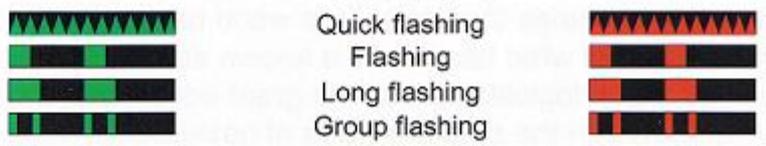
Cardinal



Lateral

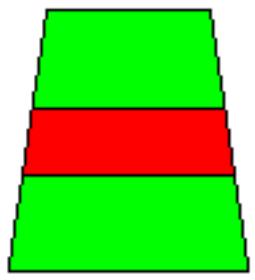


Lights, when fitted, may have any rhythm
Examples

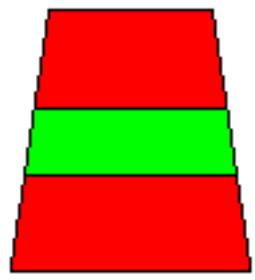


Preferred Channel

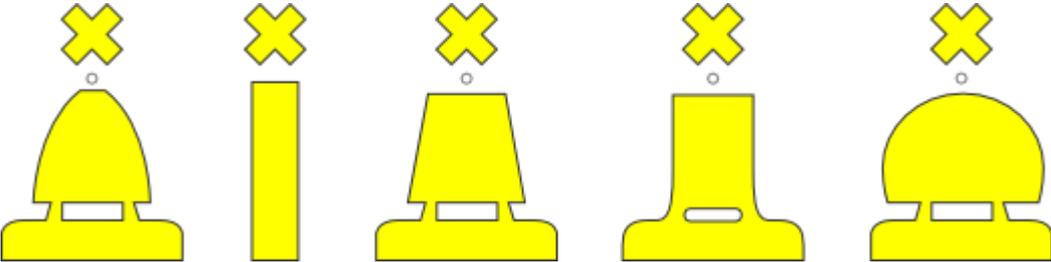
Preferred Channel
To Port



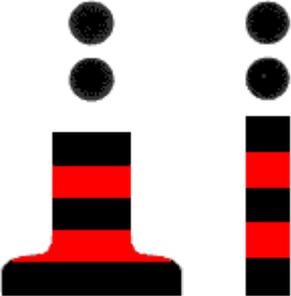
Preferred Channel
To Starboard



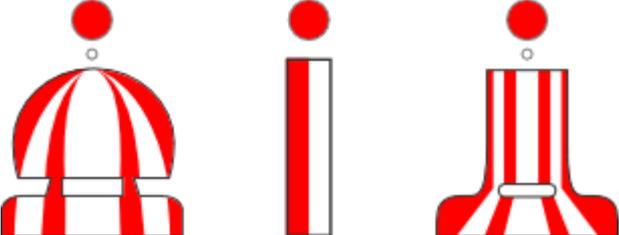
Special Mark



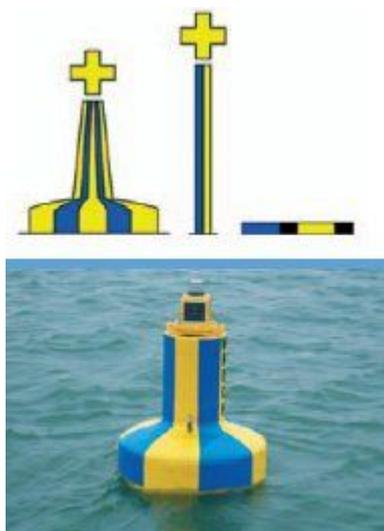
Isolated Danger



Safe Water / Fairway Buoy



Temporary Wreck



Reference Material

Free App - https://play.google.com/store/apps/details?id=com.marinus.colregslite&hl=en_GB

SOP

Horizon Guidance -