ANNEXURE – I

[See Rule 89]

MARKING OF THE WATERWAY

Buoyage and marking of the waterway

(1) Direction of buoyage .

The direction of buoyage shall be defined as follows:

(a) The general direction taken by the mariner when approaching harbour, river or estuary or waterway from seaward.

(b) In case of non-tidal rivers the direction against the flow of the river.

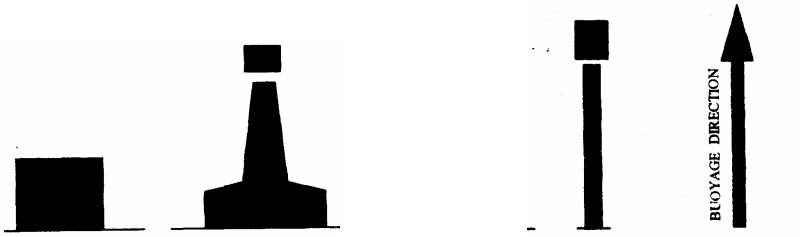
(c) The direction in which the kilometer chainage increases in case of estuary.

(2) Port hand Marks

These marks indicate the left side of the channel.

By day: Red Buoys, preferably cylindrical (CAN), or red spars. Red

Cylindrical top mark is compulsory on the spars and on the buoys if they are not cylindrical.

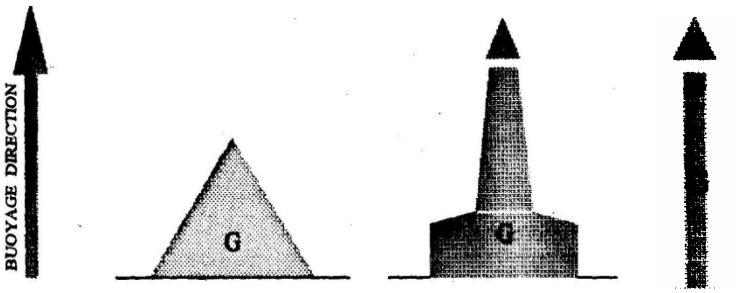


By night: Rhythmic red lights of any type

(3) Starboard hand Marks.

These marks indicate the right side of the channel.

By day : Green buoys, preferably conical, or green spars. A green conical top mark point upward is compulsory on the spars and on the buoys if they are not conical.



By night : Rhythmic green lights, of any type.

R =RED G = GREEN

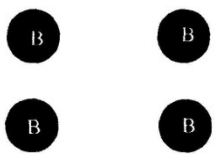
(4) Isolated danger Marks

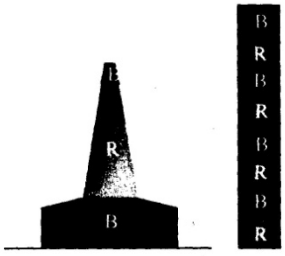
An isolated danger mark is a mark created on, or moored on, or above an isolated danger which has navigable water, all round it.

Description of an isolated danger mark

(a) Top mark: Two black spheres, one above the other.

(b) Colour: Black with one or more broad horizontal red bands.





(c) Shape: Optional, but not conflicting with lateral marks; pillar or spar preferred.

By Night: Rhythmic white light - group flashing.

R=RED B=BLACK

ANNEXURE – II

[See Rule 90]

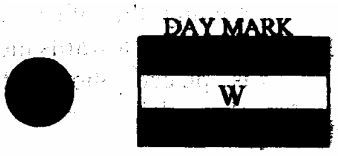
Signs and Signals

(1) Day and Night marking

Lights may be provided at night for lighting of the lower parts of a bridge, of the piers of a bridge, of the approaches to a lock, of a section of small canal etc. The lights recommended in this rules shall be visible for a distance of at least 2 kms. and shall be distinct from the surrounding lights.

Fixed lights

(1) Single red light **"No passage"**



Either to some of the channels or arms of the waterway, or to the whole of the waterway

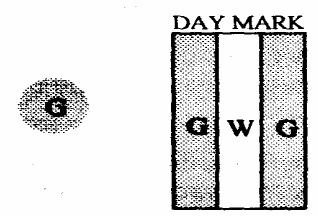
(2) Red light placed one above the other

Complete and prolonged stoppage of navigation (blockage of, waterway budges or locks out of service)

(3) Two or more red lights set apart

"No passage" (between the lights)

(4) Single green light



"GO ahead" (the green light is always placed at side of the navigable channel) The use of this signal shall however, be restricted to cases where a single green light is sufficient clearly to indicate the clear passage. In other cases the use of two green lights set apart and indicating the passage is recommended.

(5) Two green lights set apart

"Go ahead between the Lights".

(6) Single yellow light, along or between green lights may steer

"Go ahead, but look out for traffic coming the other way" Vessels

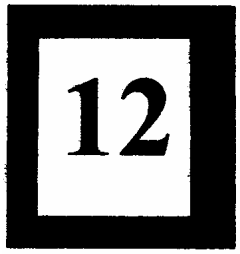
towards the light, which is placed above the navigable channel.

Y Y Or

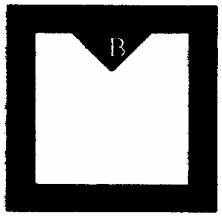
Proceed with caution.

(7) A red light above a white light "Do not cause wash"

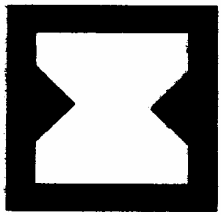
(8) Not exceed the speed indicated (in Km /hour)



(9) Clearance above water level limit



(10) Width of fairway or channel limit



W = White , R = Red , G = Green , Y = Yellow , B = Black

ANNEXURE - III

[See Rule 91]

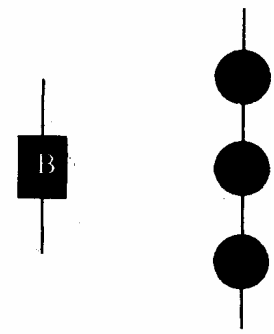
STORM WARNING SIGNALS

1. WARNING: A storm may affect you shortly Day Night

2. DANGER: A storm will soon strike you

3. DANGER: The port is threatened by a bore- tide or flash flood sudden rise in water level and strong current expected.

4. GREAT DANGER: A violent storm will soon strike you



ANNEXURE — IV

SPECIFICATION OF LIFE SAVING APPLIANCES.

1. Boats

(a) All boats shall be well designed and of such shape and proportions that they have sufficient stability and freeboard when carrying their full load of persons and equipment. With half the maximum permissible number of persons standing on one side of the boat, their shall have a freeboard of not less than 100 milli metre.

(b) All boats shall be capable of being lowered into the water with their full load of persons and equipment. They shall be of such strength that they will not suffer permanent deformation if subjected to an overload of 25 percent.

2. Life rafts

a. Every life raft shall be fitted with securing beckets.
b. Every life raft shall be so constructed as to comprise units containing a volume of air of at least 0.096 m^3. (or equivalent buoyancy devices in

the case of rigid life rafts) and have a deck area of at least 0.372 sq.m., for every person it is permitted to carry.

c. **The life raft shall be so constructed that if it is dropped into the water from the highest deck neither the life raft nor its equipment will be damaged.**
d. **Every rigid life raft shall be constructed as to retain its shape in all weather conditions, on deck and in the water.**

3. Life jackets

A life jacket shall satisfy the following requirements:

(a) It shall be properly designed and made of suitable material.
(b) It shall be capable of supporting a mass of 7.5 kg. in fresh water for 24 hours.
(c) It shall be capable of keeping the head of an exhausted or unconscious person above water.
(d) It shall be so designed as to eliminate so far as possible all risk of its being put on incorrectly, however, it shall be capable of being worn inside out.
(e) It shall be capable of turning the wearer's body, on entering the water to a safe floating position slightly inclined backwards from the vertical.
(f) It shall withstand the effects of oil and oil products and of temperatures up to 50°C.
(g) It shall be reflecting orange in colour.
(h) It shall be easy and quick to put on, and shall fasten securely to the body.
(i) It shall be fitted with a whistle held in a pocket.
(j) It shall bear the type, name of manufacturer and the year of manufacturer

4. Life buoys

(a) Every life buoy shall:

(i) be capable of supporting a mass of 14.5 kg. in fresh water for 24 hours.
(ii) be made of suitable materials and withstand the effects of oil and oil products and of temperatures up to 50°C.
(iii) be reflecting orange in colour.

(iv) have a mass of not less than 6.5 kg.
(v) have an internal diameter of 0.45metre + or -10 percent.
(vi) be encircled with rope which can be grasped.

(b) At least one life buoy on each side of the vessel shall be fitted with self igniting light and buoyant life line which is not less than 25 meter long and which is firmly secured by a hook.

5. Stowage and handling of Life Saving Appliances

(1) All buoyant apparatus and life buoys shall be so placed as to be capable of floating off the vessel freely.
(2) Suitable arrangements shall be made for access to the boats and rafts.
(3) Effective means shall be provided for lighting the life saving appliances and their launching devices.
(4) The launching devices provided for boats shall be so designed and arranged that the boats can be lowered reliably, quickly and without danger to persons.
(5) The launching devices, davits, falls, blocks and other gear shall be of such strength that the boats can be safely lowered on either side in unfavorable conditions of list or trim.
(6) Life saving appliances shall be so stowed that they are easily accessible and can be launched as quickly as possible.