

## (2) CARDINAL MARKS

Cardinal marks indicate that the deepest water in the area lies to the named side of the mark. This convention is necessary even though for example, a mark may have navigable water not only to the North but also the East and West of it. The mariner will know he is safe to the North, but must consult his chart for further guidance.

Cardinal marks can also be used to indicate that the deepest water in that area is on the named side of the mark, and to draw attention to a feature in a channel such as a bend, junction, bifurcation or end of a shoal.

Cardinal marks do not have a distinctive shape but are normally pillar or spar. They are always painted in yellow and black horizontal bands and their distinctive double cone top-marks are always black.

An aide-memoire to their colouring is provided by regarding the topmarks as pointers to the positions of the black band(s):

Topmarks pointing upward: black band above yellow band.

Topmarks pointing downward: black band below yellow band.

Topmarks pointing away from each other: black bands above and below a yellow band.

Topmarks pointing towards each other: black band with yellow bands above and below.

Cardinal marks also have a special system of flashing white lights. The rhythms are basically all "very quick" (VQ) or "quick" (Q) flashing but broken into varying lengths of the flashing phase. "Very quick flashing" is defined as a light flashing at a rate of either 120 or 100 flashes per minute, "quick flashing" is a light flashing at either 60 or 50 flashes per minute.

The characters used for Cardinal marks will be seen to be as follows:

North: Continuous very quick flashing or quick flashing.

East: Three "very quick" or "quick" flashes followed by darkness.

South: Six "very quick" or "quick" flashes followed immediately by a long flash, then darkness.

West: Nine "very quick" or "quick" flashes followed darkness.

The concept of three, six, nine is easily remembered when one associates it with a clock face. The long flash, defined as a light appearance of not less than 2 seconds, is merely a device to ensure that three or nine "very quick" or "quick" flashes cannot be mistaken for six.

It will be observed that two other marks use white lights. Each has a distinctive light rhythm which cannot be confused with the very quick or quick flashing light of the Cardinal marks.