§ 62.33 Information and regulatory marks.

(a) Information and Regulatory Marks are used to alert the mariner to various warnings or regulatory matters. These marks have orange geometric shapes against a white background. The meanings associated with the orange shapes are as follows:

1. A vertical open-faced diamond signifies danger.
2. A vertical diamond shape having a cross centered within indicates that vessels are excluded from the marked area.
3. A circular shape indicates that certain operating restrictions are in effect within the marked area.
4. A square or rectangular shape will contain directions or instructions lettered within the shape.

(b) When a buoy is used as an information or regulatory mark it shall be white with two horizontal orange bands placed completely around the buoy circumference. One band shall be near the top of the buoy body, with a second band placed just above the waterline of the buoy so that both bands are clearly visible.

§ 62.35 Mooring buoys.

Mooring Buoys are white with a blue horizontal band. This distinctive color scheme is recommended to facilitate identification and to avoid confusion with aids to navigation.

§ 62.37 Lighthouses.

Lighthouses are prominent beacons of varying size, color, and appearance employed to mark headlands, landfalls, harbor entrances, channel edges, hazards, and other features. While normally identified by their distinctive appearance, some lighthouses display diamond shaped, checkered daymarks to facilitate recognition.

§ 62.41 Ranges.

Ranges are aids to navigation systems employing dual beacons which, when the structures appear to be in line, assist the mariner in maintaining a safe course. The appropriate nautical chart must be consulted when using ranges to determine whether the range marks the centerline of the navigable channel and also to ascertain what section of the range may be safety traversed. Ranges are generally, but not always, lighted, and display rectangular daymarks of various colors.

§ 62.43 Numbers and letters.

(a) All solid red and solid green aids are numbered, with red aids bearing even numbers and green aids bearing odd numbers. The numbers for each increase in the Conventional Direction of Buoyage. Numbers are kept in approximately sequence on both sides of the channel by omitting numbers where necessary.

(b) Only sidemarks are numbered. However, aids other than those mentioned above may be lettered to assist in their identification, or to indicate their purpose. Sidemarks may carry letters in addition to numbers to identify the first aid to navigation in a waterway, or when new aids to navigation are added to channels with previously completed numerical sequences. Letters on sidemarks will follow alphabetical order from seaward and proceeding toward the Conventional Direction of Buoyage and will be added to numbers as suffixes.

(c) Aids to navigation may be fitted with light-reflecting material to increase their visibility in darkness. The colors of this material may convey the same significance as the aid except that letters and numbers may be white.

(d) Exceptions to the provisions of this section will be found on the Western Rivers System. See §62.51.

(e) The guidelines for the display of numbers and letters on aids to navigation are identical for both Region A and Region B; red aids to navigation
§ 62.45 Light characteristics.

(a) Lights on aids to navigation are differentiated by color and rhythm. Lighthouses and range lights may display distinctive light characteristics to facilitate recognition. No special significance should be attached to the color or rhythm of such lights. Other lighted aids to navigation employ light characteristics to convey additional information.

(b) When proceeding in the Conventional Direction of Buoyage, aids to navigation, if lighted, display light characteristics as follows:

(1) Green lights mark port (left) sides of channels and locations of wrecks or obstructions which are to be passed by keeping these lights on the port (left) hand of a vessel. Green lights are also used on Preferred Channel Marks where the topmost band is green.

(2) Red lights mark starboard (right) sides of channels and locations of wrecks or obstructions which are to be passed by keeping these lights on the starboard (right) hand of a vessel. Red lights are also used on Preferred Channel Marks where the topmost band is red.

(c) Yellow lights have no lateral significance. Except on the Western Rivers, see §62.51, white lights have no lateral significance. The purpose of aids exhibiting white or yellow lights may be determined by their shape, color, letters, numbers, and the light rhythm employed.

(d) Light rhythms, except as noted in §62.51 for the Western Rivers, are employed as follows:

(1) Aids with lateral significance display regularly flashing or regularly occulting light rhythms. Ordinarily, flashing lights (frequency not exceeding 30 flashes per minute) will be used.

(2) Preferred Channel Marks display a composite group flashing light rhythm (groups of two flashes followed by one flash).

(3) Safe Water Marks display a white Morse Code “A” rhythm (short-long flash).

(4) Isolated Danger Marks display a white group flashing two.

(5) Special Marks display yellow lights with fixed or slow flashing rhythm preferred.

(6) Mooring Buoys and Information and Regulatory Marks display white lights of various rhythms.

(7) For situations where lights require a distinct cautionary significance, as at sharp turns, sudden channel constrictions, wrecks, or obstructions, a quick flashing light rhythm (60 flashes per minute) may be used.

(e) Occasionally lights use sectors to mark shoals or warn mariners of other dangers. Lights so equipped show one color from most directions and a different color or colors over definite arcs of the horizon as indicated on the appropriate nautical chart. These sectors provide approximate bearing information since the observer should note a change of color as the boundary between the sectors is crossed. As sector bearings are not precise, they should be considered a warning only and not used to determine exact bearing to the light.

§ 62.47 Sound signals.

(a) Often sound signals are located on or adjacent to aids to navigation. When visual signals are obscured, sound signals warn mariners of the proximity of danger.

(1) Sound signals are distinguished by their tone and phase characteristics.

(i) Tones are determined by the devices producing the sound (i.e., diaphones, diaphragm horns, reed horns, sirens, whistles, bells and gongs).