standards for navigation lights in 33 CFR Part 84—Annex I are recommended.


§ 118.65 Lights on fixed bridges.

(a) Each fixed bridge span over a navigable channel shall be lighted so that the center of the navigable channel under each span will be marked by a range of two green lights, and each margin of each navigable channel will be marked by a red light: Provided, That when a margin of a channel is limited by a pier, only those lights prescribed in paragraph (b) of this section shall be required to mark such channel margin. The green lights shall each show through a horizontal arc of 360°; they shall be securely mounted just below the outermost edge of the bridge span structure so as to be visible from an approaching vessel. Each red light shall show through a horizontal arc of 180°, and shall be securely mounted just below the outermost edge of the bridge span structure to show 90° on either side of a line parallel to the axis of the channel so as to be visible from an approaching vessel.

NOTE: Until such time that major repairs to or replacements of existing fixed span navigation lights colored green are made, it is permitted that only one of these lights marking the centerline of the same channel under a span shall be visible to an approaching vessel. Each red light shall show through a horizontal arc of not less than 60° nor more than 180° with ½ of such arc showing either side of a line parallel to the axis of the main channel. When major repairs or replacement of such existing white lights are made, they shall conform with this paragraph.

[40 FR 24898, June 11, 1975, as amended by CGD 75–046a, 42 FR 56954, Oct. 31, 1977]

§ 118.70 Lights on swing bridges.

(a) Swing span lights on through bridges. Each swing span of every through swing bridge shall be lighted with three lanterns so that when viewed from an approaching vessel the swing span when closed will display three red lights on top of the span structure in a line parallel to and directly above the long axis of the span, one at each end of the span on the same level and one at the center of the span no less than 10 feet above the other two lights, and when open for navigation will display three green lights on top of the span structure in a line parallel to and directly above the long axis of the span, one at each end of the span on the same level and one at the center of the span no less than 10 feet above the other two lights. Each lantern shall show through alternate red and green horizontal arcs of 60° each, the axis of adjacent arcs to be 90° from each other; each light shall be securely mounted with the axis of the green arcs parallel to the long axis of the swing span.

(b) Pier lights. When the navigable channel extends from pier to pier or when piers are located within the navigable channel, each end of such piers shall be lighted with a red light. Each such light shall show through a horizontal arc of 180°, and shall be securely fastened at the end of the pier as low as practicable but not lower than 2 feet above navigable high water to show 90° on each side of a line parallel to the axis of the channel so as to be visible from an approaching vessel.

(c) Main channel. When necessary, the District Commander may prescribe that fixed bridges having two or more spans over a navigable channel shall have the main channel span marked with a set of three white lights arranged in a vertical line directly above each green light on the main channel span. Each white light shall show through a horizontal arc of 180°, and shall be mounted so that ½ of the horizontal arc will show on either side of a line parallel to the axis of the channel. These three white lights shall be securely mounted on the bridge structure and spaced as nearly 15 feet apart as the structure of the bridge will permit, with a minimum spacing of 7 feet. The lowest white light in the line of three lights shall be placed not less than 10 nor more than 15 feet above each green light on the main channel span.

NOTE: Until such time that major repairs to or replacements of existing main channel lights showing white are made, it is permitted that these lights show through a horizontal arc of not less than 60° nor more than 180° with ½ of such arc showing either side of a line parallel to the axis of the main channel. When major repairs or replacement of such existing white lights are made, they shall conform with this paragraph.

(40 FR 24898, June 11, 1975, as amended by CGD 75–046a, 42 FR 56954, Oct. 31, 1977)
similar type swing bridge shall be lighted with four lanterns so that when viewed from an approaching vessel the swing span when closed will display one red light at each end, and when open to navigation will display two green lights from each end. Each lantern shall show through one red and two green horizontal arcs of \(60^\circ\) each, the axis of each green arc to be \(90^\circ\) from the axis of the red arc; each light shall be securely mounted at the floor level of the span as near to the side of the span as practicable with the axis of the red light normal to the long axis of the swing span and so that the red light will be visible from an approaching vessel when the span is closed.

(c) **Pier lights.** Every swing bridge shall be lighted so that each end of the piers adjacent to the navigable channel (draw piers) or each end of their protection piers (draw pier protection piers) and each end of the piers protecting the pivot pier (pivot protection pier) will be marked by a red light. Each of these lights shall show through a horizontal arc of \(180^\circ\) and shall be mounted as low as practicable below the floor level of the swing span to show \(90^\circ\) on either side of a line parallel to the axis of the channel so as to be visible from an approaching vessel.

(d) **Axis lights.** Every swing bridge shall be lighted so that the intersection of the bridge axis with each side of the pivot pier and the channel side of each draw pier which has a protection pier will be marked by a red light. **Provided,** That if the draw and draw protection piers are straight along their channel faces these lights shall not be required. Each such light shall show through a horizontal arc of \(180^\circ\), and shall be mounted on the navigable channel face of the pier as low as practicable below the floor level of the swing span to show \(90^\circ\) either side of a line normal to the axis of the navigable channel so as to be visible from an approaching vessel.

(e) **Omission of lights.** Where the permanent navigable channel passes on only one side of the pivot pier of any swing span, the District Commander may authorize the omission of lighting of the unused channel.

§ 118.75 Lights on single-opening drawbridges.

(a) **Bridges in this class.** Bridges of the folding, pontoon and similar type single opening drawbridges are included in this class.

(b) **Draw span lights.** Each draw span of every single opening drawbridge shall be lighted with two lanterns so that when viewed from an approaching vessel the draw span when closed will display two red lights, one at each end of the span and when open to navigation will display two green lights, one at each end of the span. Each lantern shall show alternate red and green horizontal arcs of \(60^\circ\) each, the axis of adjacent arcs to be located \(90^\circ\) from each other; each lantern shall be securely mounted 15 feet above the roadway with the axis of the green arcs parallel to the long axis of the swing span.

(c) **Pier or abutment lights.** Every swing bridge shall be lighted so that the end of each pier, abutment or fixed portion of the bridge adjacent to the navigable channel through the draw, or each end of the protection piers for such piers, abutments, or fixed portion of the bridge will be marked by a red light. Each red light shall show through an arc of \(180^\circ\), and shall be securely mounted on the pier, abutment or fixed portion of the bridge as low as practicable to show \(90^\circ\) on either side of a line parallel to the axis of the channel so as to be visible from an approaching vessel.

§ 118.80 Lights on bascule bridges.

(a) **Lift span lights.** Each lift span of every bascule bridge shall be lighted so that the free end of the span will be marked on each side by a green light which shows only when the span is fully open for the passage of a vessel and by a red light which shows for all other positions of the lift span. Each red and each green light shall show through a horizontal arc of \(180^\circ\). The lighting apparatus shall be securely mounted to the side of the span so that the light will show equally on either side of a line parallel to the axis of the channels, so that they will be visible from an approaching vessel.

**Note:** Until such time that major repairs to or replacement of lift span navigation lights are made, existing lights may show...