

**PART 84—ANNEX I: POSITIONING
AND TECHNICAL DETAILS OF
LIGHTS AND SHAPES**

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SOURCE: CGD 81-008, 46 FR 62447, Dec. 24, 1981, unless otherwise noted.

§ 84.01 Definitions.

(a) The term *height above the hull* means height above the uppermost continuous deck. This height shall be measured from the position vertically beneath the location of the light.

(b) *High-speed craft* means a craft capable of maximum speed in meters per second (m/s) equal to or exceeding: $3.7\sqrt[0.1667]{\nabla}$; where ∇ =displacement corresponding to the design waterline (cubic meters).

NOTE TO PARAGRAPH (b): The same formula expressed in pounds and knots is maximum speed in knots (kts) equal to exceeding $1.98(\text{lbs})\sqrt[0.1667]{\nabla}$; where ∇ =displacement corresponding to design waterline in pounds.

(c) The term *practical cut-off* means, for vessels 20 meters or more in length, 12.5 percent of the minimum luminous intensity (Table 84.15(b)) corresponding to the greatest range of visibility for which the requirements of Annex I are met.

(d) The term *Rule* or *Rules* means the Inland Navigation Rules contained in sec. 2 of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591, 94 Stat. 3415,

33 U.S.C. 2001, December 24, 1980) as amended.

[CGD 81-008, 46 FR 62447, Dec. 24, 1981, as amended by CGD 94-011, 63 FR 5731, Feb. 4, 1998; USCG-2012-0306, 77 FR 37313, June 21, 2012]

§ 84.03 Vertical positioning and spacing of lights.

(a) On a power-driven vessel of 20 meters or more in length the masthead lights shall be placed as follows:

(1) The forward masthead light, or if only one masthead light is carried, then that light, at a height above the hull of not less than 5 meters, and, if the breadth of the vessel exceeds 5 meters, then at a height above the hull not less than such breadth, so however that the light need not be placed at a greater height above the hull than 8 meters;

(2) When two masthead lights are carried the after one shall be at least 2 meters vertically higher than the forward one.

(b) The vertical separation of the masthead lights of power-driven vessels shall be such that in all normal conditions of trim the after light will be seen over and separate from the forward light at a distance of 1000 meters from the stem when viewed from water level.

(c) The masthead light of a power-driven vessel of 12 meters but less than 20 meters in length shall be placed at a height above the gunwale of not less than 2.5 meters.

(d) The masthead light, or the all-round light described in Rule 23(c), of a power-driven vessel of less than 12 meters in length shall be carried at least one meter higher than the sidelights.

(e) One of the two or three masthead lights prescribed for a power-driven vessel when engaged in towing or pushing another vessel shall be placed in the same position as either the forward masthead light or the after masthead light, provided that the lowest after masthead light shall be at least 2 meters vertically higher than the highest forward masthead light.

(f)(1) The masthead light or lights prescribed in Rule 23(a) shall be so placed as to be above and clear of all other lights and obstructions except as