

§ 45.27 Location of marks; nonfixed-wing aircraft.

(a) *Rotorcraft.* Each operator of a rotorcraft shall display on that rotorcraft horizontally on both surfaces of the cabin, fuselage, boom, or tail the marks required by § 45.23.

(b) *Airships.* Each operator of an airship shall display on that airship the marks required by § 45.23, horizontally on—

(1) The upper surface of the right horizontal stabilizer and on the under surface of the left horizontal stabilizer with the top of the marks toward the leading edge of each stabilizer; and

(2) Each side of the bottom half of the vertical stabilizer.

(c) *Spherical balloons.* Each operator of a spherical balloon shall display the marks required by § 45.23 in two places diametrically opposite and near the maximum horizontal circumference of that balloon.

(d) *Nonspherical balloons.* Each operator of a nonspherical balloon shall display the marks required by § 45.23 on each side of the balloon near its maximum cross section and immediately above either the rigging band or the points of attachment of the basket or cabin suspension cables.

(e) *Powered parachutes and weight-shift-control aircraft.* Each operator of a powered parachute or a weight-shift-control aircraft must display the marks required by §§ 45.23 and 45.29(b)(2) of this part. The marks must be displayed in two diametrically opposite positions on the fuselage, a structural member, or a component of the aircraft and must be visible from the side of the aircraft.

[Doc. No. 2047, 29 FR 3223, Mar. 11, 1964, as amended by Amdt. 45-15, 48 FR 11392, Mar. 17, 1983; Amdt. 45-24, 69 FR 44863, July 27, 2004; Amdt. 45-25, 72 FR 52469, Sept. 14, 2007]

§ 45.29 Size of marks.

(a) Except as provided in paragraph (f) of this section, each operator of an aircraft shall display marks on the aircraft meeting the size requirements of this section.

(b) *Height.* Except as provided in paragraph (h) of this part, the nationality and registration marks must be of equal height and on—

(1) Fixed-wing aircraft, must be at least 12 inches high, except that:

(i) An aircraft displaying marks at least 2 inches high before November 1, 1981 and an aircraft manufactured after November 2, 1981, but before January 1, 1983, may display those marks until the aircraft is repainted or the marks are repainted, restored, or changed;

(ii) Marks at least 3 inches high may be displayed on a glider;

(iii) Marks at least 3 inches high may be displayed on an aircraft for which the FAA has issued an experimental certificate under § 21.191 (d), § 21.191 (g), or § 21.191 (i) of this chapter to operate as an exhibition aircraft, an amateur-built aircraft, or a light-sport aircraft when the maximum cruising speed of the aircraft does not exceed 180 knots CAS; and

(iv) Marks may be displayed on an exhibition, antique, or other aircraft in accordance with § 45.22.

(2) Airships, spherical balloons, nonspherical balloons, powered parachutes, and weight-shift-control aircraft must be at least 3 inches high; and

(3) Rotorcraft, must be at least 12 inches high, except that rotorcraft displaying before April 18, 1983, marks required by § 45.29(b)(3) in effect on April 17, 1983, and rotorcraft manufactured on or after April 18, 1983, but before December 31, 1983, may display those marks until the aircraft is repainted or the marks are repainted, restored, or changed.

(c) *Width.* Characters must be two-thirds as wide as they are high, except the number “1”, which must be one-sixth as wide as it is high, and the letters “M” and “W” which may be as wide as they are high.

(d) *Thickness.* Characters must be formed by solid lines one-sixth as thick as the character is high.

(e) *Spacing.* The space between each character may not be less than one-fourth of the character width.

(f) If either one of the surfaces authorized for displaying required marks under § 45.25 is large enough for display of marks meeting the size requirements of this section and the other is not, full size marks shall be placed on the larger surface. If neither surface is large enough for full-size marks, marks