Part 45 IDENTIFICATION AND REGISTRATION MARKING	
Subpart CNationality and Registration Marks	

Sec. 45.21

#### General.

- (a) Except as provided in Sec. 45.22, no person may operate a U.S.-registered aircraft unless that aircraft displays nationality and registration marks in accordance with the requirements of this section and Secs. 45.23 through 45.33.
- (b) Unless otherwise authorized by the Administrator, no person may place on any aircraft a design, mark, or symbol that modifies or confuses the nationality and registration marks.
- (c) Aircraft nationality and registration marks must--
- (1) Except as provided in paragraph (d) of this section, be painted on the aircraft or affixed by any other means insuring a similar degree of permanence;
- (2) Have no ornamentation;
- (3) Contrast in color with the background; and
- (4) Be legible.
- (d) The aircraft nationality and registration marks may be affixed to an aircraft with readily removable material if--
- (1) It is intended for immediate delivery to a foreign purchaser;
- (2) It is bearing a temporary registration number; or
- (3) It is marked temporarily to meet the requirements of Sec. 45.22(c)(1) or Sec.
- 45.29(h) of this part, or both.

Part 45 IDENTIFICATION AND REGISTRATION MARKING	
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Marks	

Sec. 45.22

Exhibition, antique, and other aircraft: Special rules.

- (a) When display of aircraft nationality and registration marks in accordance with Secs. 45.21 and 45.23 through 45.33 would be inconsistent with exhibition of that aircraft, a U.S.-registered aircraft may be operated without displaying those marks anywhere on the aircraft if:
- (1) It is operated for the purpose of exhibition, including a motion picture or television production, or an airshow;
- (2) Except for practice and test fights necessary for exhibition purposes, it is operated only at the location of the exhibition, between the exhibition locations, and between those locations and the base of operations of the aircraft; and
- (3) For each flight in the United States:
- (i) It is operated with the prior approval of the Flight Standards District Office, in the case of a flight within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for the takeoff airport, or within 4.4 nautical miles of that airport if it is within

Class G airspace; or

- (ii) It is operated under a flight plan filed under either Sec. 91.153 or Sec. 91.169 of this chapter describing the marks it displays, in the case of any other flight.
- (b) A small U.S.-registered aircraft built at least 30 years ago or a U.S.-registered aircraft for which an experimental certificate has been issued under Sec. 21.191(d) or 21.191(g) for operation as an exhibition aircraft or as an amateur-built aircraft and which has the same external configuration as an aircraft built at least 30 years ago may be operated without displaying marks in accordance with Secs. 45.21 and 45.23 through 45.33 if:
- (1) It displays in accordance with Sec. 45.21(c) marks at least 2 inches high on each side of the fuselage or vertical tail surface consisting of the Roman capital letter "N" followed by:
- (i) The U.S. registration number of the aircraft; or
- (ii) The symbol appropriate to the airworthiness certificate of the aircraft ("C", standard; "R", restricted; "L", limited; or "X", experimental) followed by the U.S. registration number of the aircraft; and
- (2) It displays no other mark that begins with the letter "N" anywhere on the aircraft, unless it is the same mark that is displayed under paragraph (b)(1) of this section.
- (c) No person may operate an aircraft under paragraph (a) or (b) of this section--
- (1) In an ADIZ or DEWIZ described in Part 99 of this chapter unless it temporarily bears marks in accordance with Secs. 45.21 and 45.23 through 45.33;
- (2) In a foreign country unless that country consents to that operation; or
- [(3) In any operation conducted under Part 121, 133, 135, or 137 of this chapter.]
- (d) If, due to the configuration of an aircraft, it is impossible for a person to mark it in accordance with Secs. 45.21 and 45.23 through 45.33, he may apply to the Administrator for a different marking procedure.

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Sec. 45.23

Display of marks; general.

- (a) Each operator of an aircraft shall display on that aircraft marks consisting of the Roman capital letter "N" (denoting United States registration) followed by the registration number of the aircraft. Each suffix letter used in the marks displayed must also be a Roman capital letter.
- [(b) When marks include only the Roman capital letter "N" and the registration number is displayed on limited, restricted or light-sport category aircraft or experimental or provisionally certificated aircraft, the operator must also display on that aircraft near each entrance to the cabin, cockpit, or pilot station, in letters not less than 2 inches nor more than 6 inches high, the words "limited," "restricted," "light-sport," "experimental," or "provisional," as applicable.]

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Sec. 45.25

Location of marks on fixed-wing aircraft.

- (a) The operator of a fixed-wing aircraft shall display the required marks on either the vertical tail surfaces or the sides of the fuselage, except as provided in Sec. 45.29(f).
- (b) The marks required by paragraph (a) of this section shall be displayed as follows:
- (1) If displayed on the vertical tail surfaces, horizontally on both surfaces, horizontally on both surfaces of a single vertical tail or on the outer surfaces of a multivertical tail. However, on aircraft on which marks at least 3 inches high may be displayed in accordance with Sec. 45.29(b)(1), the marks may be displayed vertically on the vertical tail surfaces.
- (2) If displayed on the fuselage surfaces, horizontally on both sides of the fuselage between the trailing edge of the wing and the leading edge of the horizontal stabilizer. However, if engine pods or other appurtenances are located in this area and are an integral part of the fuselage side surfaces, the operator may place the marks on those pods or appurtenances.

Part 45 IDENTIFICATION AND REGISTRATION MARKING	
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Sec. 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 Sec. 45.23.
- (b) *Airships*. Each operator of an airship shall display on that airship the marks required by Sec. 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 Sec. 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 Sec. 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 Sec. Sec. 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.]

Part 45 IDENTIFICATION AND REGISTRATION MARKING	
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Sec. 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 Sec. 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 Sec. 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.

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Sec. 45.29

Size of marks AÇD[ } dD

- (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 Sec. 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 as large as practicable shall be displayed on the larger of the two surfaces. If no surface authorized to be marked by Sec. 45.27 is large enough for full-size marks, marks as large as practicable shall be placed on the largest of the authorized surfaces. However, powered parachutes and weight-shift-control aircraft must display marks at least 3 inches high.1
- (g) Uniformity. The marks required by this part for fixed-wing aircraft must have the same height, width, thickness, and spacing on both sides of the aircraft.
- (h) After March 7, 1988, each operator of an aircraft penetrating an ADIZ or DEWIZ shall display on that aircraft temporary or permanent nationality and registration marks at least 12 inches high.

Part 45 IDENTIFICATION AND REGISTRATION MARKING	
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Sec. 45.31

Marking of export aircraft.

A person who manufactures an aircraft in the United States for delivery outside thereof may display on that aircraft any marks required by the State of registry of the aircraft. However, no person may operate an aircraft so marked within the United States, except for test and demonstration flights for a limited period of time, or while in necessary transit to the purchaser.

Sec. 45.33

Sale of aircraft; removal of marks.

When an aircraft that is registered in the United States is sold, the holder of the Certificate of Aircraft Registration shall remove, before its delivery to the purchaser, all United States marks from the aircraft, unless the purchaser is--

- (a) A citizen of the United States;
- (b) An individual citizen of a foreign country who is lawfully admitted for permanent residence in the United States; or
- (c) When the aircraft is to be based and primarily used in the United States, a corporation (other than a corporation which is a citizen of the United States) lawfully organized and doing business under the laws of the United States or any State thereof.