

Title 14—Aeronautics and Space
CHAPTER I—FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

[Docket No. 14130; Amdts. 1-27 and 45-9]

PART 1—DEFINITIONS AND ABBREVIATIONS

PART 45—IDENTIFICATION AND REGISTRATION MARKING

Nationality and Registration Marks on Fixed-Wing Aircraft

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment allows a reduction in the size of the required nationality and registration marks on certain fixed-wing aircraft and requires that each suffix letter used in the marks be a Roman capital letter. It is intended to provide relief requested by operators of the aircraft and to ensure needed uniformity of marks.

EFFECTIVE DATE: September 14, 1977.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:

Interested persons have been afforded an opportunity to participate in the making of this amendment by a notice of proposed rule making (Notice No. 74-36) issued on November 12, 1974, and published in the Federal Register on November 21, 1974 (39 FR 40862). Due consideration has been given to all comments received in response to the notice. Except as otherwise discussed in this amendment, the amendment and the reasons for it are identical to the proposal and the reasons set forth in the notice.

Notice 74-36 was issued partly in response to two petitions. The Experimental Aircraft Association (EAA) petitioned for an amendment of § 45.29(b) (1) to allow display of the required nationality and registration marks no more than three inches high either in a horizontal or vertical manner on both sides of the vertical tail surface of fixed-wing small aircraft and 18-inch marks on the underside of the left wing. The Citizens Task Force on Noise Control of Seattle, Wash., petitioned the FAA to provide for under-wing markings, distinguishable by persons with normal vision for a distance of 1,800 feet.

Over 3,000 public comments were received in response to the notice. Almost all of the commentators on the proposed under-wing marks opposed them. The majority of the commentators were concerned about the cost of the under-wing marks. The FAA estimates the minimum total cost to be over 18 million dollars. This cost could be higher due to inflation, since the proposal would allow five years for compliance with the rule.

A number of opposing commentators were of the opinion that the proposed under-wing marks would not be an effective means of positive ground-to-air identification. After further consideration, the FAA agrees with these commentators. In proposing this requirement, the FAA relied on a number of cases in which violators of the Federal Aviation Regulations have been identified by under-wing marks alone or by those marks together with side or tail marks. However, after review of the comments received and all the information available on under-wing marks, it is clear that these marks are useful for identification purposes only under ideal conditions.

For these reasons, the proposed requirement for 18 inch marks on the lower surface of the left wing of fixed-wing aircraft is withdrawn, and the petition of the Citizens Task Force on Noise Control of Seattle, Wash., is denied.

In response to the EAA petition, Notice 74-36 proposed to allow 3 inch marks on the vertical tail surfaces or the sides of the fuselage on small aircraft which cannot exceed 180 knots when using 70 percent of maximum cruising power, if the proposed under-wing marks were displayed. This proposal was consistent with the current position of the Department of Defense that it no longer considers 12 inch marks as necessary for the air-to-air identification of these aircraft when they penetrate or operate in an Air Defense Identification Zone (ADIZ) or Distant Early Warning Identification Zone (DEWIZ).

Over 1,500 comments were directed to this proposal. The majority of these commentators favored using 3 inch marks without the under-wing marks. In view of the fact that 12 inch marks on the tail or fuselage have proved only minimally successful in ground-to-air identification, the 3 inch marks provision is being adopted without the proposed under-wing requirement.

However, the FAA has determined that the reference to "maximum cruising power" may be confusing, and that it would be more appropriate to use terms used in type certificate data sheets for most small aircraft. Accordingly, the

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provision, as adopted, references design cruising speed (V_c), maximum structural cruising speed (V_{no}), and maximum operating limit speed (V_{mo}). When none of these speeds exceeds 180 knots, 3 inch marks may be used on the aircraft. Three inch marks may be used on an aircraft that does not have a V_c , V_{no} , or V_{mo} , when the maximum cruising speed has been shown to the satisfaction of the Administrator to not exceed 180 knots.

Finally, Notice 74-36 proposed to insert the words "at each location" in the lead-in portion of § 45.29(b), in order to require that the character marks be the same height, width, thickness, and spacing on both sides of the aircraft. For clarity this proposal has been adopted as a new paragraph (g) in § 45.29.

DRAFTING INFORMATION

The principal authors of this document are J. F. Zahringer, Flight Standards Service, and Joseph Dorsey, Office of the Chief Counsel.

ADOPTION OF THE AMENDMENT

Accordingly, Parts 1 and 45 of the Federal Aviation Regulations (14 CFR Parts 1 and 45) are amended, effective September 14, 1977, as follows:

1. By amending § 1.2 by inserting the following symbol after " V_{ns} " and before " V_R ":

§ 1.2 Abbreviations and symbols.

V_{no} means maximum structural cruising speed.

2. By amending § 45.23(a) to read as follows:

§ 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.

3. By amending § 45.25 to read as follows:

§ 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 § 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 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 § 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.

4. By amending § 45.29(b)(1) and adding a new § 45.29(g) to read as follows:

§ 45.29 Size of marks.

(b) *Height.* The character marks must be of equal height and on—

(1) Fixed-wing aircraft must be at least 12 inches high, except that marks at least 3 inches high may be displayed on small aircraft when none of the following exceeds 180 knots TAS:

(i) V_c ;

(ii) V_{mo} ;

(iii) V_{no} ; and

(iv) If V_c , V_{mo} , or V_{no} has not been determined for the aircraft, the speed shown to be the maximum cruising speed of the aircraft;

(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.

(Sections 907(c), 918(a), and 601, Federal Aviation Act of 1958, as amended (49 U.S.C. §§ 1348(c), 1354(a), 1421); sec. 6(c), Department of Transportation Act (49 U.S.C. 1556(e).)

Note.—The Federal Aviation Administration has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11821, as amended by Executive Order 11940, and OMB Circular A-107.

Issued in Washington, D.C., on August 5, 1977.

LANGHORNE BOND,
Administrator.