

§ 29.1555 Control markings.

(a) Each cockpit control, other than primary flight controls or control whose function is obvious, must be plainly marked as to its function and method of operation.

(b) For powerplant fuel controls—

(1) Each fuel tank selector valve control must be marked to indicate the position corresponding to each tank and to each existing cross feed position;

(2) If safe operation requires the use of any tanks in a specific sequence, that sequence must be marked on, or adjacent to, the selector for those tanks; and

(3) Each valve control for any engine of a multiengine rotorcraft must be marked to indicate the position corresponding to each engine controlled.

(c) Usable fuel capacity must be marked as follows:

(1) For fuel systems having no selector controls, the usable fuel capacity of the system must be indicated at the fuel quantity indicator.

(2) For fuel systems having selector controls, the usable fuel capacity available at each selector control position must be indicated near the selector control.

(d) For accessory, auxiliary, and emergency controls—

(1) Each essential visual position indicator, such as those showing rotor pitch or landing gear position, must be marked so that each crewmember can determine at any time the position of the unit to which it relates; and

(2) Each emergency control must be red and must be marked as to method of operation.

(e) For rotorcraft incorporating retractable landing gear, the maximum landing gear operating speed must be displayed in clear view of the pilot.

[Doc. No. 5084, 29 FR 16150, Dec. 3, 1964, as amended by Amdt. 29-12, 41 FR 55474, Dec. 20, 1976; Amdt. 29-24, 49 FR 44440, Nov. 6, 1984]

§ 29.1557 Miscellaneous markings and placards.

(a) *Baggage and cargo compartments, and ballast location.* Each baggage and cargo compartment, and each ballast location must have a placard stating any limitations on contents, including weight, that are necessary under the loading requirements.

(b) *Seats.* If the maximum allowable weight to be carried in a seat is less than 170 pounds, a placard stating the lesser weight must be permanently attached to the seat structure.

(c) *Fuel and oil filler openings.* The following apply:

(1) Fuel filler openings must be marked at or near the filler cover with—

(i) The word “fuel”;

(ii) For reciprocating engine powered rotorcraft, the minimum fuel grade;

(iii) For turbine-engine-powered rotorcraft, the permissible fuel designations, except that if impractical, this information may be included in the rotorcraft flight manual, and the fuel filler may be marked with an appropriate reference to the flight manual; and

(iv) For pressure fueling systems, the maximum permissible fueling supply pressure and the maximum permissible defueling pressure.

(2) Oil filler openings must be marked at or near the filler cover with the word “oil”.

(d) *Emergency exit placards.* Each placard and operating control for each emergency exit must differ in color from the surrounding fuselage surface as prescribed in § 29.811(h)(2). A placard must be near each emergency exit control and must clearly indicate the location of that exit and its method of operation.

[Doc. No. 5084, 29 FR 16150, Dec. 3, 1964, as amended by Amdt. 29-3, 33 FR 971, Jan. 26, 1968; Amdt. 29-12, 41 FR 55474, Dec. 20, 1976; Amdt. 29-26, 53 FR 34220, Sept. 2, 1988]

§ 29.1559 Limitations placard.

There must be a placard in clear view of the pilot that specifies the kinds of operations (VFR, IFR, day, night, or icing) for which the rotorcraft is approved.

[Amdt. 29-24, 49 FR 44440, Nov. 6, 1984]

§ 29.1561 Safety equipment.

(a) Each safety equipment control to be operated by the crew in emergency, such as controls for automatic liferaft releases, must be plainly marked as to its method of operation.

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(b) Each location, such as a locker or compartment, that carries any fire extinguishing, signaling, or other life saving equipment, must be so marked.

(c) Stowage provisions for required emergency equipment must be conspicuously marked to identify the contents and facilitate removal of the equipment.

(d) Each liferaft must have obviously marked operating instructions.

(e) Approved survival equipment must be marked for identification and method of operation.

§ 29.1565 Tail rotor.

Each tail rotor must be marked so that its disc is conspicuous under normal daylight ground conditions.

[Amdt. 29-3, 33 FR 971, Jan. 26, 1968]

ROTORCRAFT FLIGHT MANUAL

§ 29.1581 General.

(a) *Furnishing information.* A Rotorcraft Flight Manual must be furnished with each rotorcraft, and it must contain the following:

(1) Information required by §§ 29.1583 through 29.1589.

(2) Other information that is necessary for safe operation because of design, operating, or handling characteristics.

(b) *Approved information.* Each part of the manual listed in §§ 29.1583 through 29.1589 that is appropriate to the rotorcraft, must be furnished, verified, and approved, and must be segregated, identified, and clearly distinguished from each unapproved part of that manual.

(c) [Reserved]

(d) *Table of contents.* Each Rotorcraft Flight Manual must include a table of contents if the complexity of the manual indicates a need for it.

(Secs. 313(a), 601, 603, 604, and 605 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, 1424, and 1425); and sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)))

[Amdt. 29-15, 43 FR 2327, Jan. 16, 1978]

§ 29.1583 Operating limitations.

(a) *Airspeed and rotor limitations.* Information necessary for the marking of airspeed and rotor limitations on or near their respective indicators must

be furnished. The significance of each limitation and of the color coding must be explained.

(b) *Powerplant limitations.* The following information must be furnished:

(1) Limitations required by § 29.1521.

(2) Explanation of the limitations, when appropriate.

(3) Information necessary for marking the instruments required by §§ 29.1549 through 29.1553.

(c) *Weight and loading distribution.* The weight and center of gravity limits required by §§ 29.25 and 29.27, respectively, must be furnished. If the variety of possible loading conditions warrants, instructions must be included to allow ready observance of the limitations.

(d) *Flight crew.* When a flight crew of more than one is required, the number and functions of the minimum flight crew determined under § 29.1523 must be furnished.

(e) *Kinds of operation.* Each kind of operation for which the rotorcraft and its equipment installations are approved must be listed.

(f) *Limiting heights.* Enough information must be furnished to allow compliance with § 29.1517.

(g) *Maximum allowable wind.* For Category A rotorcraft, the maximum allowable wind for safe operation near the ground must be furnished.

(h) *Altitude.* The altitude established under § 29.1527 and an explanation of the limiting factors must be furnished.

(i) *Ambient temperature.* Maximum and minimum ambient temperature limitations must be furnished.

(Secs. 313(a), 601, 603, 604, and 605 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, 1424, and 1425); and sec. 6(c), Dept. of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 5084, 29 FR 16150, Dec. 3, 1964, as amended by Amdt. 29-3, 33 FR 971, Jan. 26, 1968; Amdt. 29-15, 43 FR 2327, Jan. 16, 1978; Amdt. 29-17, 43 FR 50602, Oct. 30, 1978; Amdt. 29-24, 49 FR 44440, Nov. 6, 1984]

§ 29.1585 Operating procedures.

(a) The parts of the manual containing operating procedures must have information concerning any normal and emergency procedures, and other information necessary for safe