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the rotorcraft during its type certification.

(2) Center of gravity. The location of the center of gravity must, for all loading conditions, be within the range established for the rotorcraft during its type certification. For Class C rotorcraft-load combinations, the magnitude and direction of the loading force must be established at those values for which the effective location of the center of gravity remains within its established range.

[Doc. No. 14324, 41 FR 55475, Dec. 20, 1976, as amended by Amdt. 133–12, 55 FR 8006, Mar. 6, 1990]

§ 133.45 Operating limitations.

In addition to the operating limitations set forth in the approved Rotorcraft Flight Manual, and to any other limitations the Administrator may prescribe, the operator shall establish at least the following limitations and set them forth in the Rotorcraft-Load Combination Flight Manual for rotorcraft-load combination operations:

- (a) The rotorcraft-load combination may be operated only within the weight and center of gravity limitations established in accordance with $\S 133.43(c)$.
- (b) The rotorcraft-load combination may not be operated with an external load weight exceeding that used in showing compliance with §§ 133.41 and 133.43.
- (c) The rotorcraft-load combination may not be operated at airspeeds greater than those established in accordance with §133.41 (b), (c), and (d).
- (d) No person may conduct an external-load operation under this part with a rotorcraft type certificated in the restricted category under §21.25 of this chapter over a densely populated area, in a congested airway, or near a busy airport where passenger transport operations are conducted.
- (e) The rotorcraft-load combination of Class D may be conducted only in accordance with the following:
- (1) The rotorcraft to be used must have been type certificated under transport Category A for the operating weight and provide hover capability with one engine inoperative at that operating weight and altitude.

- (2) The rotorcraft must be equipped to allow direct radio intercommunication among required crewmembers.
- (3) The personnel lifting device must be FAA approved.
- (4) The lifting device must have an emergency release requiring two distinct actions.

[Doc. No. 1529, 29 FR 603, Jan. 24, 1964, as amended by Amdt. 133–1, 30 FR 883, Jan. 28, 1965; Amdt. 133–5, 41 FR 55476, Dec. 20, 1976; Amdt. 133–6, 42 FR 24198, May 12, 1977; Amdt. 133–9, 51 FR 40709, Nov. 7, 1986]

§ 133.47 Rotorcraft-load combination flight manual.

The applicant must prepare a Rotor-craft-Load Combination Flight Manual and submit it for approval by the Administrator. The manual must be prepared in accordance with the rotorcraft flight manual provisions of subpart G of part 27 or 29 of this chapter, which-ever is applicable. The limiting height-speed envelope data need not be listed as operating limitations. The manual must set forth—

- (a) Operating limitations, procedures (normal and emergency), performance, and other information established under this subpart;
- (b) The class of rotorcraft-load combinations for which the airworthiness of the rotorcraft has been demonstrated in accordance with §§ 133.41 and 133.43; and
- (c) In the information section of the Rotorcraft-Load Combination Flight Manual—
- (1) Information on any peculiarities discovered when operating particular rotorcraft-load combinations;
- (2) Precautionary advice regarding static electricity discharges for Class B, Class C, and Class D rotorcraft-load combinations; and
- (3) Any other information essential for safe operation with external loads.

[Doc. No. 1529, 29 FR 603, Jan. 24, 1964, as amended by Amdt. 133–9, 51 FR 40709, Nov. 7, 1986]

§ 133.49 Markings and placards.

The following markings and placards must be displayed conspicuously and must be such that they cannot be easily erased, disfigured, or obscured:

- (a) A placard (displayed in the cockpit or cabin) stating the class of rotor-craft-load combination for which the rotorcraft has been approved and the occupancy limitation prescribed in §133.45(a).
- (b) A placard, marking, or instruction (displayed next to the external-load attaching means) stating the maximum external load prescribed as an operating limitation in §133.45(c).

§ 133.51 Airworthiness certification.

A Rotorcraft External-Load Operator Certificate is a current and valid airworthiness certificate for each rotorcraft type certificated under part 27 or 29 of this chapter (or their predecessor parts) and listed by registration number on a list attached to the certificate, when the rotorcraft is being used in operations conducted under this part.

[Doc. No. 24550, 51 FR 40709, Nov. 7, 1986]

PART 135—OPERATING REQUIRE-MENTS: COMMUTER AND ON DE-MAND OPERATIONS AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT

SPECIAL FEDERAL AVIATION REGULATION No. 36 [NOTE]

Special Federal Aviation Regulation No. 50-2 [Note]

SPECIAL FEDERAL AVIATION REGULATION NO. 71 [NOTE]

SPECIAL FEDERAL AVIATION REGULATION NO. 89 [NOTE]

SPECIAL FEDERAL AVIATION REGULATION NO. 93 [NOTE]

SPECIAL FEDERAL AVIATION REGULATION No. 97 [NOTE]

SPECIAL FEDERAL AVIATION REGULATION No. 106 [NOTE]

SPECIAL FEDERAL AVIATION REGULATION NO. 108

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