

§ 135.393

the route, route segment, or area concerned:

- (1) The reliability of wind and weather forecasting.
- (2) The location and kinds of navigation aids.
- (3) The prevailing weather conditions, particularly the frequency and amount of turbulence normally encountered.

- (4) Terrain features.
- (5) Air traffic problems.
- (6) Any other operational factors that affect the operations.

(c) For the purposes of this section, it is assumed that—

- (1) The critical engine is inoperative;
- (2) The propeller of the inoperative engine is in the minimum drag position;
- (3) The wing flaps and landing gear are in the most favorable position;
- (4) The operating engines are operating at the maximum continuous power available;
- (5) The airplane is operating in standard atmosphere; and
- (6) The weight of the airplane is progressively reduced by the anticipated consumption of fuel and oil.

§ 135.393 Large nontransport category airplanes: Landing limitations: Destination airports.

(a) No person operating a large nontransport category airplane may take off that airplane at a weight that—

- (1) Allowing for anticipated consumption of fuel and oil, is greater than the weight that would allow a full stop landing within 60 percent of the effective length of the most suitable runway at the destination airport; and

(2) Is greater than the weight allowable if the landing is to be made on the runway—

- (i) With the greatest effective length in still air; and
- (ii) Required by the probable wind, taking into account not more than 50 percent of the headwind component or not less than 150 percent of the tailwind component.

(b) For the purpose of this section, it is assumed that—

- (1) The airplane passes directly over the intersection of the obstruction clearance plane and the runway at a height of 50 feet in a steady gliding ap-

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proach at a true indicated airspeed of at least $1.3 V_{SO}$;

- (2) The landing does not require exceptional pilot skill; and
- (3) The airplane is operating in standard atmosphere.

§ 135.395 Large nontransport category airplanes: Landing limitations: Alternate airports.

No person may select an airport as an alternate airport for a large nontransport category airplane unless that airplane (at the weight anticipated at the time of arrival), based on the assumptions in § 135.393(b), can be brought to a full stop landing within 70 percent of the effective length of the runway.

§ 135.397 Small transport category airplane performance operating limitations.

(a) No person may operate a reciprocating engine powered small transport category airplane unless that person complies with the weight limitations in § 135.365, the takeoff limitations in § 135.367 (except paragraph (a)(3)), and the landing limitations in §§ 135.375 and 135.377.

(b) No person may operate a turbine engine powered small transport category airplane unless that person complies with the takeoff limitations in § 135.379 (except paragraphs (d) and (f)) and the landing limitations in §§ 135.385 and 135.387.

§ 135.398 Commuter category airplanes performance operating limitations.

(a) No person may operate a commuter category airplane unless that person complies with the takeoff weight limitations in the approved Airplane Flight Manual.

(b) No person may take off an airplane type certificated in the commuter category at a weight greater than that listed in the Airplane Flight Manual that allows a net takeoff flight path that clears all obstacles either by a height of at least 35 feet vertically, or at least 200 feet horizontally within the airport boundaries and by at least 300 feet horizontally after passing the boundaries.

(c) No person may operate a commuter category airplane unless that