§ 23.69 Enroute climb/descent.

(a) All engines operating. The steady gradient and rate of climb must be determined at each weight, altitude, and ambient temperature within the operational limits established by the applicant with—

(1) Not more than maximum continuous power on each engine;
(2) The landing gear retracted;
(3) The wing flaps retracted; and
(4) A climb speed not less than 1.3 $V_{S1}$.

(b) One engine inoperative. The steady gradient and rate of climb/descent must be determined at each weight, altitude, and ambient temperature within the operational limits established by the applicant with—

(1) The critical engine inoperative and its propeller in the minimum drag position;
(2) The remaining engine(s) at not more than maximum continuous power;
(3) The landing gear retracted;
(4) The wing flaps retracted; and
(5) A climb speed not less than 1.3 $V_{S1}$.

[Doc. No. 27807, 61 FR 5187, Feb. 9, 1996]


The maximum horizontal distance traveled in still air, in nautical miles, per 1,000 feet of altitude lost in a glide, and the speed necessary to achieve this must be determined with the engine inoperative, its propeller in the minimum drag position, and landing gear and wing flaps in the most favorable available position.

[Doc. No. 27807, 61 FR 5187, Feb. 9, 1996]

§ 23.73 Reference landing approach speed.

(a) For normal, utility, and acrobatic category reciprocating engine-powered airplanes of 6,000 pounds or less maximum weight, the reference landing approach speed, $V_{REF}$, must not be less than the greater of $V_{MC}$, determined in §23.149(b) with the wing flaps in the most extended takeoff position, and 1.3 $V_{SO}$.

(b) For normal, utility, and acrobatic category reciprocating engine-powered airplanes of more than 6,000 pounds maximum weight, and turbine engine-powered airplanes in the normal, utility, and acrobatic category, the reference landing approach speed, $V_{REF}$, must not be less than the greater of $V_{MC}$, determined in §23.149(c), and 1.3 $V_{SO}$.

(c) For commuter category airplanes, the reference landing approach speed, $V_{REF}$, must not be less than the greater of 1.05 $V_{MC}$, determined in §23.149(c), and 1.3 $V_{SO}$.

[Doc. No. 27807, 61 FR 5187, Feb. 9, 1996]

§ 23.75 Landing distance.

The horizontal distance necessary to land and come to a complete stop from a point 50 feet above the landing surface must be determined, for standard