§ 23.1507 Airspeed limitations.

(2) Not more than the lesser of—
   (i) 0.9 $V_D$ established under §23.335; or
   (ii) 0.9 times the maximum speed shown under §23.251.

(b) The maximum structural cruising speed $V_{NO}$ must be established so that it is—
   (1) Not less than the minimum value of $V_C$ allowed under §23.335; and
   (2) Not more than the lesser of—
      (i) $V_C$ established under §23.335; or
      (ii) 0.89 $V_{NE}$ established under paragraph (a) of this section.

(c) Paragraphs (a) and (b) of this section do not apply to turbine airplanes or to airplanes for which a design diving speed $V_D/M_D$ is established under §23.335(b)(4). For those airplanes, a maximum operating limit speed ($V_{MO}/M_{MO}$-airspeed or Mach number, whichever is critical at a particular altitude) must be established as a speed that may not be deliberately exceeded in any regime of flight (climb, cruise, or descent) unless a higher speed is authorized for flight test or pilot training operations. $V_{MO}/M_{MO}$ must be established so that it is—
   (1) Not less than the minimum value of $V_C$ allowed under §23.335; and
   (2) Not more than the lesser of—
      (i) $V_C$ established under §23.335; or
      (ii) 0.89 $V_{NE}$ established under paragraph (a) of this section.

(d) Paragraphs (a) and (b) of this section do not apply to turbine airplanes or to airplanes for which a design diving speed $V_D/M_D$ is established under §23.335(b)(4). For those airplanes, a maximum operating limit speed ($V_{MO}/M_{MO}$-airspeed or Mach number, whichever is critical at a particular altitude) must be established as a speed that may not be deliberately exceeded in any regime of flight (climb, cruise, or descent) unless a higher speed is authorized for flight test or pilot training operations.

§ 23.1507 Operating maneuvering speed.

The maximum operating maneuvering speed, $V_{MO}$, must be established as an operating limitation. $V_{MO}$ is a selected speed that is not greater than $V_{SN}$ in established in §23.335(c).

§ 23.1511 Flap extended speed.

(a) The flap extended speed $V_{FE}$ must be established so that it is—
   (1) Not less than the minimum value of $V_F$ allowed in §23.345(b); and
   (2) Not more than $V_F$ established under §23.345(a), (c), and (d).

(b) Additional combinations of flap setting, airspeed, and engine power may be established if the structure has been proven for the corresponding design conditions.

§ 23.1513 Minimum control speed.

The minimum control speed $V_{MC}$ determined under §23.149, must be established as an operating limitation.

§ 23.1519 Weight and center of gravity.

The weight and center of gravity limitations determined under §23.23 must be established as operating limitations.

§ 23.1521 Powerplant limitations.

(a) General. The powerplant limitations prescribed in this section must be established so that they do not exceed the corresponding limits for which the engines or propellers are type certified. In addition, other powerplant...
§ 23.1527 Maximum operating altitude.

The maximum operating altitude must be sufficient, as limited by flight, structural, powerplant, functional or equipment characteristics, to ensure that the airplane is limited in the operating limitations for the airplane.

[Doc. No. 26269, 58 FR 42166, Aug. 6, 1993]

§ 23.1523 Minimum flight crew.

The minimum flight crew must be established so that it is sufficient for safe operation considering—

(a) The workload on individual crewmembers and, in addition for commuter category airplanes, each crewmember workload determination must consider the following:

(1) Flight path control,
(2) Collision avoidance,
(3) Navigation,
(4) Communications,
(5) Operation and monitoring of all essential airplane systems,
(6) Command decisions, and
(7) The accessibility and ease of operation of necessary controls by the appropriate crewmember during all normal and emergency operations when at the crewmember flight station;

(b) The accessibility and ease of operation of necessary controls by the appropriate crewmember; and

(c) The kinds of operation authorized under § 23.1525.


§ 23.1524 Maximum passenger seating configuration.

The maximum passenger seating configuration must be established.

[Amdt. 23–10, 36 FR 2864, Feb. 11, 1971]

§ 23.1525 Kinds of operation.

The kinds of operation authorized (e.g. VFR, IFR, day or night) and the meteorological conditions (e.g. icing) to which the operation of the airplane is limited or from which it is prohibited, must be established appropriate to the installed equipment.

[Doc. No. 26269, 58 FR 42166, Aug. 6, 1993]

§ 23.1527 Maximum operating altitude.

(a) The maximum altitude up to which operation is allowed, as limited by flight, structural, powerplant, functional or equipment characteristics, must be established.