Federal Aviation Administration, DOT

§ 23.1507 Airspeed limitations.

(a) The never-exceed speed $V_{NE}$ must be established so that it is—

(1) Not less than $0.9$ times the minimum value of $V_D$ allowed under § 23.335; and

(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 not greater than the design cruising speed $V_C/M_C$ and so that it is sufficiently below $V_D/M_D$ and the maximum speed shown under § 23.251 to make it highly improbable that the latter speeds will be inadvertently exceeded in operations. The speed margin between $V_{MO}/M_{MO}$ and $V_D/M_D$ or the maximum speed shown under § 23.251 may not be less than the speed margin established between $V_C/M_C$ and $V_D/M_D$ under § 23.335(b), or the speed margin found necessary in the flight test conducted under § 23.253.


§ 23.1507 Operating maneuvering speed.

The maximum operating maneuvering speed, $V_o$, must be established