§ 23.1583  Operating limitations.

The Airplane Flight Manual must contain operating limitations determined under this part 23, including the following—

(a) Airspeed limitations. The following information must be furnished:

(1) Information necessary for the marking of the airspeed limits on the indicator as required in §23.1545, and the significance of each of those limits and of the color coding used on the indicator.

(2) The speeds $V_{MC}$, $V_O$, $V_{LE}$, and $V_{LO}$, if established, and their significance.

(3) In addition, for turbine powered commuter category airplanes—

(i) The maximum operating limit speed, $V_{MO}$/$M_{MO}$ and a statement that this speed must 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;

(ii) If an airspeed limitation is based upon compressibility effects, a statement to this effect and information as to any symptoms, the probable behavior of the airplane, and the recommended recovery procedures; and

(iii) The airspeed limits must be shown in terms of $V_{MO}$/$M_{MO}$ instead of $V_{SO}$ and $V_{NE}$.

(b) Powerplant limitations. The following information must be furnished:

(1) Limitations required by §23.1521,

(2) Explanation of the limitations, when appropriate.

(3) Information necessary for marking the instruments required by §23.1549 through §23.1553.

(c) Weight. The airplane flight manual must include—

(1) The maximum weight; and

(2) The maximum landing weight, if the design landing weight selected by the applicant is less than the maximum weight.

(3) For reciprocating engine-powered airplanes of more than 6,000 pounds maximum weight, single-engine turbines, and multiengine jets 6,000 pounds or less maximum weight in the normal, utility, and acrobatic category, performance operating limitations as follows—

(i) The maximum takeoff weight for each airport altitude and ambient temperature within the range selected by the applicant at which the airplane complies with the climb requirements of §23.63(c)(1).

(ii) The maximum landing weight for each airport altitude and ambient temperature within the range selected by the applicant at which the airplane complies with the climb requirements of §23.63(c)(2).

(4) For normal, utility, and acrobatic category multiengine jets over 6,000 pounds and commuter category airplanes, the maximum takeoff weight for each airport altitude and ambient temperature within the range selected by the applicant at which—

(i) The airplane complies with the climb requirements of §23.63(d)(1); and

(ii) The accelerate-stop distance determined under §23.55 is equal to the available runway length plus the length of any clearway and either:

(A) The takeoff distance determined under §23.59(a) is equal to the available runway length; or

(B) At the option of the applicant, the takeoff distance determined under §23.59(a) is equal to the available runway length plus the length of any stopway, if utilized; and either:

(A) The takeoff distance determined under §23.59(a) is equal to the available runway length; or

(B) At the option of the applicant, the takeoff distance determined under §23.59(a) is equal to the available runway length plus the length of any clearway and the takeoff run determined under §23.59(b) is equal to the available runway length.

(5) For normal, utility, and acrobatic category multiengine jets over 6,000 pounds...
§ 23.1585 Operating procedures.

(a) For all airplanes, information concerning normal, abnormal (if applicable), and emergency procedures and other pertinent information necessary for safe operation and the achievement of the scheduled performance must be furnished, including—

(1) An explanation of significant or unusual flight or ground handling characteristics;

(2) The maximum demonstrated values of crosswind for takeoff and landing; and procedures and information pertinent to operations in crosswinds;

(3) A recommended speed for flight in rough air. This speed must be chosen to

(p) Types of surface. A statement of the types of surface on which operations may be conducted. (See §§ 23.45(g) and 23.1587(a)(4), (c)(2), and (d)(4)).