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 $\begin{array}{l} t_2=t_1+\Delta t\\ t_{max}=t_2+\pi/\omega;\\ \Delta t= the \mbox{ minimum period of time necessary} \end{array}$

to allow the prescribed limit load factor

to be achieved in the initial direction, but it need not exceed five seconds (see figure below).



(iv) In cases where the flight deck pitch control motion may be affected by inputs from systems (for example, by a stick pusher that can operate at high load factor as well as at 1g), then the effects of those systems shall be taken into account.

(v) Airplane loads that occur beyond the following times need not be considered:

(A) For the nose-up pitching maneuver, the time at which the normal acceleration at the center of gravity goes below 0g;

(B) For the nose-down pitching maneuver, the time at which the normal acceleration at the center of gravity goes above the positive limit load factor prescribed in §25.337; (C) t_{max.}.

[Doc. No. 5066, 29 FR 18291, Dec. 24, 1964, as amended by Amdt. 25–23, 35 FR 5672, Apr. 8, 1970; Amdt. 25–46, 43 FR 50594, Oct. 30, 1978; 43 FR 52495, Nov. 13, 1978; 43 FR 54082, Nov. 20, 1978; Amdt. 25–72, 55 FR 29775, July 20, 1990; 55 FR 37607, Sept. 12, 1990; Amdt. 25–86, 61 FR 5220, Feb. 9, 1996; Amdt. 25–91, 62 FR 40704, July 29, 1997; Amdt. 25–141, 79 FR 73466, Dec. 11, 2014]

§25.333 Flight maneuvering envelope.

(a) General. The strength requirements must be met at each combination of airspeed and load factor on and within the boundaries of the representative maneuvering envelope (V-n diagram) of paragraph (b) of this section. This envelope must also be used in determining the airplane structural operating limitations as specified in §25.1501.

(b) Maneuvering envelope.