

Code of Federal Regulations

This Section of CFR is No Longer Current.

▼ Sec. 25.143

Part 25 AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES	
Subpart B--Flight	Controllability and Maneuverability

Sec. 25.143

General.

(a) The airplane must be safely controllable and maneuverable during--

- (1) Takeoff;
- (2) Climb;
- (3) Level flight;
- (4) Descent; and
- (5) Landing.

(b) It must be possible to make a smooth transition from one flight condition to any other without exceptional piloting skill, alertness, or strength and without danger of exceeding the limit-load factor under any probable operating conditions (including the sudden failure of any engine).

(c) If, during the testing required by paragraphs (a) and (b) of this section, marginal conditions exist with regard to required pilot strength, the "strength of pilots" limits may not exceed the limits prescribed in the following table:

Values in pounds of force as applied to the control wheel or rudder pedals.	Pitch	Roll	Yaw
For temporary application ----- ----	75	60	180
For prolonged application ----- ---	10	5	20

(d) In showing the temporary control force limitations of paragraph (c) of this section, approved operating procedures or conventional operating practices must be followed (including being as nearly trimmed as possible at the next preceding steady flight condition, except that, in the case of takeoff, the airplane must be trimmed in accordance with approved operating procedures).

(e) For the purpose of complying with the prolonged control force limitations of paragraph (c) of this section, the airplane must be as nearly trimmed as possible.