making of this amendment, and due consideration has been given to all relevant matter presented.

In consideration of the foregoing, Part 4b of the Civil Air Regulations (14 CFR Part 4b, as amended) is hereby amended as follows, effective May 3, 1962.

By amending §4b.1 by adding paragraphs (b)(2), (d)(8), (d)(10), (d)(15), and (d)(16) to read as follows:

§ 4b.1 Definitions.

(b) General design.  
(1) Maximum ambient atmospheric temperature. The maximum ambient atmospheric temperature is the temperature selected by the applicant as the maximum operational limit.

(d) Speeds.  
(6) V_{F/Mc}. The design flight speed for flight loading conditions. (See §4b.210)

(b)(1)

(15) V_{M0/MC}: The maximum operating limit speed. (See §4b.717)

§ 4b.11 [amendment]

2. By amending §4b.11(b) by inserting in the first sentence between the words "required" and "except" the phrase "notwithstanding the applicant may have been issued a provisional type certificate".

3. By amending §4b.130 by adding the following paragraphs (d), (e), and (f) to read as follows:

§ 4b.130 Controllability; general.

(c) Compliance with the "strength of pilots" limits in paragraph (c) of this section shall not be required unless the condition is found to be marginal. In the latter case, they shall not exceed the following limits:

<table>
<thead>
<tr>
<th>Pitch</th>
<th>Roll</th>
<th>Yaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

Pitch and roll forces shall be measured in pounds and applied to the control wheel.

(d) For the purpose of complying with the temporary control force limitations of paragraph (c) of this section, the airplane shall be operated in accordance with approved operating procedures or conventional operating practice including, as nearly trimmed as possible, at the prior steady flight condition, except that in the case of trenched airplanes, the airplane shall be trimmed in accordance with approved operating procedures.

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

§ 4b.131 [Amendment]

4. By amending §4b.131(b) by deleting the first sentence and inserting in lieu thereof the following: "During each of the following control tabulation demonstrations, a change in the trim control shall not be required. In addition, ejection of more than 50 pounds control force, representative of the maximum temporary force which can readily be applied by one hand, shall not be required.

§ 4b.132 [Amendment]

5. By amending §4b.132(e) by deleting the last sentence and inserting in lieu thereof "V_{F/Mc}" and inserting in lieu thereof "V_{M0/MC}"

§ 4b.141 [Amendment]

6. By amending §4b.141 by deleting the words "V_{F/Mc} or to M_{0}, whichever is the lesser" and inserting in lieu thereof "V_{M0/MC}"

§ 4b.142 [Amendment]

7. By amending §4b.142(c) by deleting the word "F/Mc or M_{0} whichever is the lesser" and inserting in lieu thereof "V_{M0/MC}"

8. By amending §4b.150 to read as follows:

§ 4b.150 General.

The airplane shall be longitudinally, directionally, and laterally stable in accordance with §4b.151 through §4b.158. Suitable stability shall be required in other conditions normally encountered in service if flight tests show such stability to be necessary for safe operation.

§ 4b.150–1 [Deletion]


10. By amending §4b.151 by adding the introductory paragraph and paragraphs (a) and (c) to read as follows:

§ 4b.151 Static longitudinal stability.

In the conditions outlined in §§4b.152 through §4b.158, the characteristics of the elevator control forces including friction and the elevator control surface displacement shall comply with paragraphs (a) through (c) of this section.

(a) A pull shall be required to obtain and maintain speeds below the specified trim speed, and a push shall be required to obtain and maintain speeds above the specified trim speed, except that if the elevator control forces are not dependent upon the hinge moments of the elevator control surface it shall also be shown that an upward displacement of the elevator trailing edge is required to obtain and maintain speeds below the specified trim speed, and a downward displacement of the elevator trailing edge is required to obtain and maintain speeds above the specified trim speed.

(c) The airplane trimmed at the best rate-of-climb speed except that the speed need not be less than 1.4 V_{S}.

§ 4b.154–1 [Deletion]

17. By deleting §4b.154–1.

18. By amending §4b.155 to read as follows:

§ 4b.155 Stability during cruising.

(a) Landing gear retracted; high speed. The stick force curve and, if required by §4b.151(e), the elevator control forces shall have stable slopes at all speeds from V_{F/Mc} to the speed equal to V_{F/Mc} - 2.4 V_{T} or to 50 knots less than the trim speed specified in subparagraph (d) of this paragraph, whichever

0.5 pounds per 8 knots nor shall it exceed a value with which control of the airplane is difficult.

§ 4b.151–1 [Deletion]


12. By amending §4b.152 to read as follows:

§ 4b.152 Stability during landing.

The stick force curve and, if required by §4b.151(a), the elevator angle curve shall have stable slopes and the stick force shall not exceed 60 pounds at any speed between 1.1 V_{S} and 1.8 V_{S} with:

(a) Wing flaps in the landing position;

(b) The landing gear extended;

(c) Maximum landing weight;

(d) Power, or thrust, off on all engines; and

(e) The airplane trimmed at 1.4 V_{S} with power or thrust off.

§ 4b.152–1 [Deletion]


14. By amending §4b.153 to read as follows:

§ 4b.153 Stability during approach.

The stick force curve and, if required by §4b.151(a), the elevator angle curve shall have stable slopes at all speeds between 1.3 V_{S} and 1.8 V_{S} with:

(a) Wing flaps in the approach position;

(b) Landing gear retracted;

(c) Maximum landing weight; and

(d) The airplane trimmed at 1.4 V_{S} with power sufficient to maintain flight at this speed.

§ 4b.153–1 [Deletion]


16. By amending §4b.154 to read as follows:

§ 4b.154 Stability during climb.

The stick force curve and, if required by §4b.151(a), the elevator angle curve shall have stable slopes at all speeds between 85 and 115 percent of the speed at which the airplane is trimmed with:

(a) Wing flaps retracted;

(b) Landing gear retracted;

(c) Maximum takeoff weight;

(d) 25 percent of maximum continuous power for rotating engines; maximum power or thrust selected by the applicant as an operating limitation for use during climb (see §4b.719) for turbine engines; and

(e) The airplane trimmed at the best rate-of-climb speed except that the speed need not be less than 1.4 V_{S}.

§ 4b.154–1 [Deletion]

17. By deleting §4b.154–1.

18. By amending §4b.155 to read as follows:

§ 4b.155 Stability during cruising.

(a) Landing gear retracted; high speed. The stick force curve and, if required by §4b.151(a), the elevator angle curve shall have stable slopes at all speeds from V_{F/Mc} to the speed equal to V_{F/Mc} - 1.4 V_{T} or to 50 knots less than the trim speed specified in subparagraph (d) of this paragraph, whichever