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UNITED STATES OF AMERICA  
CIVIL AERONAUTICS BOARD  
WASHINGTON, D. C.

Civil Air Regulations Amendment 4b-11

Effective: May 11, 1949

Adopted: May 11, 1949

FLAP POSITION IN THE APPROACH CONFIGURATION

Section 4b.1231 (c) (2) requires that the wing flaps, in the approach position, shall be set so that the stalling speed of the airplane in this configuration does not exceed 1.06 times the stalling speed of the airplane in the landing configuration. This amendment changes the value of 1.06 to a value of 1.10.

The present ratio of approach stalling speed to landing stalling speed of 1.06 was originally established on the basis of information on airplanes having relatively low wing loadings. In the past few years new airplanes with relatively high wing loadings have been introduced into service. From service experience with these airplanes, it has been ascertained that appropriate approach flap settings result in higher approach stalling speeds than would be obtained by compliance with the current ratio of 1.06. It is believed that the increase of the ratio to 1.10 will provide a more realistic relation between the approach and landing configurations of the typical aircraft type certificated under Part 4b. While the increase in this value will permit a slight increase in allowable landing weights in certain operations where relatively long runways are available, it is not believed that this will have any adverse effect on safety.

The Board has also considered certain operational complexities, the elimination of which has been suggested as an additional reason for increasing the ratio from 1.06 to 1.10. The Board does not believe that multiple flap settings present operational complexities of such a nature as to require their elimination. However, it is believed that the increased value herein adopted will in some instances eliminate the necessity for multiple flap settings, and thus simplify operation of the aircraft.

Interested persons have been afforded an opportunity to participate in the making of this amendment, and due consideration has been given to all relevant matter presented. Since this amendment imposes no additional burden on any person, it may be made effective without further notice.

In consideration of the foregoing the Civil Aeronautics Board hereby amends Part 4b of the Civil Air Regulations (14 CFR, Part 4b, as amended) effective immediately:

By amending § 4b.1231 (c) (2) to read as follows:

(2) wing flaps set in position such that  $V_{S1}$  does not exceed  $1.10 V_{S0}$ ,

(Secs. 205 (a), 601, 603, 52 Stat. 984, 1007, 1009; 49 U.S.C. 425 (a), 551, 553)

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan  
Secretary

(SEAL)