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

Civil Air Regulations Amendment 41-4
Effective: March 5, 1952
Adopted: January 28, 1952

OPERATION RULES FOR SCHEDULED AIR CARRIER OPERATIONS OUTSIDE THE CONTINENTAL LIMITS OF THE UNITED STATES

Part 41 of the Civil Air Regulations presently makes allowance in operations conducted under that part for the use of a 50 percent wind component in computing the effective length of a runway, in the case of a take-off or landing into the wind. This amendment adds the requirement of the use of not less than 150 percent of the reported wind component in down-wind take-offs and landings when computing the take-off and landing distance limitations.

Further, in order to make the performance operating limitations consistent with the airworthiness requirements specified in Part 4b of the Civil Air Regulations, this amendment provides that the one-engine-inoperative en route climb be specified in terms of a criterion based upon the number of engines rather than upon the maximum weight of the airplane.

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.

In consideration of the foregoing the Civil Aeronautics Board hereby amends Part 41 of the Civil Air Regulations (14 CFR, Part 41, as amended) effective March 5, 1952:

1. By amending § 41.27 by deleting the reference "§§ 4b.71 to 4b.171" and inserting in lieu thereof "Part 4b."

2. By amending § 41.29 (c) to read as follows:

41.29 Take-off limitations to provide for engine failure. * * *

(c) In applying the requirements of paragraphs (a) and (b) of this section, corrections shall be made for any gradient of the take-off surface. To allow for wind effect, take-off data based on still air may be corrected by not more than 50 percent of the reported wind component along the take-off path if opposite to the direction of take-off, and shall be corrected by not less than 150 percent of the reported wind component if in the direction of take-off.

3. By amending § 41.30 (b) to read as follows:

41.30 En route limitations. * * *

(b) *All airplanes; one engine inoperative.* Airplanes shall be dispatched only at such take-off weights that, in proceeding along the intended track with the weight of the airplane progressively reduced by the anticipated consumption of fuel and oil, the rate of climb with one engine inoperative (as set forth in the Airplane Flight Manual) shall be, in feet per minute, $(.06 - \frac{.08}{N}) V_{s_o}{}^2$, where N is the number of engines installed and V_{s_o} is expressed in miles per hour, at an altitude at least 1,000 feet above the elevation of the highest ground or obstruction within 10 miles of either side of the intended track; except that for airplanes certificated under the performance requirements of Part 4a of this subchapter the above rate-of-climb value shall be $0.02\ V_{s_o}{}^2$ irrespective of the number of engines installed.

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4. By amending § 41.33 (b) to read as follows:

41.33 Landing distance limitations. * * *

(b) For every probable condition of wind velocity and direction and the corresponding landing direction at the airport of intended destination required either by the ground handling characteristics of the airplane type involved or by other conditions (e.g., landing aids, terrain, etc.) the ratio of landing distance to effective length of landing area shall not be greater than that as specified in paragraph (a) of this section, after allowing for the effect on landing path and roll of not more than 50 percent of the wind component along the landing path if opposite to the direction of landing, or not less than 150 percent of the wind component if in the direction of landing.

[Sec. 205 (a), 52 Stat. 984; 49 U. S. C. 425 (a). Interpret or apply secs. 601, 604, 52 Stat. 1007, 1010; 49 U. S. C. 551, 554.]

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan
Secretary

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