Regulations
Serial Number 397

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

Effective: September 6, 1947
Adopted: August 21, 1947

SPECIAL CIVIL AIR REGULATION

TEMPERATURE ACCOUNTABILITY FOR TAKE-OFF LIMITATIONS PERTAINING TO TRANSPORT CATEGORY AIRPLANES USED IN SCHEDULED PASSENGER SERVICE

Deviation of outside air temperature from that of standard air can have an appreciable effect upon the take-off performance of an airplane. At the present time the pertinent operating requirements do not take into account such effect adequately. Amendments to Parts 41 and 61 of the Civil Air Regulations to provide temperature accountability are being considered by the Board. However, the implementation of these amendments will take considerable time after their adoption. In the meantime the Board considers it immediately necessary that a direct temperature accountability be applied by these operators to the take-off limitations. The following Special Civil Air Regulation is intended to be applied by these operators until the time when the amendments to Parts 41 and 61 concerning temperature accountability become mandatory or are put into effect sooner by the individual operators.

Due to the emergency nature of this regulation, compliance with the notice and procedures required by paragraphs (a) and (b) of Section 4 of the Administrative Procedure Act is impracticable, and a delay in the promulgation of this Special Regulation would not be in the public interest.

Effective September 6, 1947, the following effects of temperature accountability shall be added to the take-off limitations of §§ 41.271 and 61.7122:

For the individual model airplanes enumerated below, the take-off weight or the minimum length of runway, or both, and the critical-engine-failure speed, V_1, shall be further modified to include the following corrections. Correction values shall be applied by adding them algebraically, noting temperatures above the standard as positive, and noting those below the standard as negative.

Airplane	Correction to weight and/or Runway Length (Use either column or combinations)		Correction to V_1
	# /deg. F	ft./deg. F	mph/deg. F
Lockheed 649, 749	-90	/9	-.10
Lockheed 49-46	-65	/6	-.07
C-54, DC-4	-90	/10	0
DC-6	-70	/10	0
Boeing SA-307B-1	-50	/9	-.08
Martin 202 Temp. above Std.	-300	/12.5	0
Temp. below Std.	-110	/15	0

By the Civil Aeronautics Board

/s/ M. C. Mulligan
M. C. Mulligan
Secretary

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