

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

Civil Air Regulations Amendment 41-14  
Effective: November 21, 1957  
Adopted: October 17, 1957

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

ELIMINATION OF THE REQUIREMENT IN PERIODIC FLIGHT CHECK  
AND INSTRUCTION FOR SIMULATED MAXIMUM AUTHORIZED WEIGHT  
CONDITIONS FOR TAKE-OFF WITH ONE ENGINE INOPERATIVE

By virtue of presently effective Civil Air Regulations, a pilot who is to serve as a pilot in command must pass, periodically, a proficiency check in airplanes that he flies. This check flight includes a demonstration of the ability to complete a take-off at maximum take-off weight with the critical engine inoperative, a requirement which the Board has found to be no longer practical for the periodic checks.

In the large modern transport airplane a great difference exists between maximum certificated take-off weight and maximum certificated landing weight. If such an airplane is flown at maximum weight for a check flight, it must be loaded with large quantities of fuel or ballast. Then, if the flight is to be terminated within a reasonable time, fuel, ballast, or both must be dumped so as to reduce the weight to that permitted for landing.

To avoid the obvious disadvantages of the above, the Board by regulation has permitted maximum take-off weight to be simulated. This has been done by reducing take-off power, or by limiting take-off distance to the minimum required for the weight at which the airplane is being operated. Neither procedure has been fully satisfactory. Time-consuming calculations and special runway markings are required, and even with these devices the maximum take-off weight condition to be simulated cannot be fully represented. Furthermore, use of reduced power settings for take-offs has been opposed by engine manufacturers who contend that the practice is injurious to the powerplants, and by supervisory training personnel who state that the practice encourages non-standard and improper use of the powerplant controls and induces an additional hazard to flight. It appears, therefore, that the requirement for an actual or simulated take-off at maximum certificated weight with one engine inoperative should not be continued as a regulatory requirement in the periodic proficiency check. It should be understood, however, that this amendment will not affect the present requirements in initial pilot flight training for simulation of engine failure at actual or simulated maximum weights in take-off, landing, and approach configurations.

Interested persons have been afforded an opportunity to participate in the making of this amendment (22 F.R. 522), 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 November 21, 1957.

By amending § 41.53 (a) by adding at the end of the fourth sentence: "Provided, That subsequent to the initial check and instruction, actual or simulated maximum authorized weight on take-off shall not be required."

(Sec. 205 (2), 52 Stat. 984; 49 U.S.C. 425 (a). Interpret or apply secs. 601, 604, 52 Stat. 1007, 1010, as amended; 49 U.S.C. 551-554)

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan  
Secretary

(SEAL)