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

Civil Air Regulations Amendment 04a-6
Effective: March 15, 1947
Adopted: February 4, 1947

SERVICE TESTS FOR AIRCRAFT

A study of accidents and maintenance problems of relatively new model aircraft indicates that in the initial stages of operating such new aircraft extensive maintenance difficulties are apt to occur. Such a situation is undoubtedly conducive to accidents caused by mechanical malfunctioning of the troublesome components or equipment, and remains serious until the difficulties are eventually overcome. This situation would be materially relieved if prior to type certification the aircraft were subjected to tests specifically designed to ascertain the reliability and proper functioning of the airplane, its components, and equipment. The requirements hereinafter set forth are intended to make mandatory the conducting of such tests.

It appearing to the Board that the subject of these regulations has been under consideration for several months; that proposed regulations essentially similar to those hereinafter set forth were circulated to the aircraft industry in August 1946; that in adopting these regulations the date of their effectiveness is being delayed sufficiently to give the public ample notice; that in view of the foregoing sufficient public procedure has been afforded in regard to the regulations, and that any further proceeding would serve only to delay the regulations which it is in the public interest to adopt at this time;

The Civil Aeronautics Board finds that the notice and public procedures provided for in paragraphs (a) and (b) of Section 4 of the Administrative Procedure Act are unnecessary.

NOW, THEREFORE: Effective March 15, 1947, Part 04a of the Civil Air Regulations is amended as follows:

1. By deleting the second sentence of § 04a.04.
2. By adding § 04a.040 to read as follows:

04a.040 Flight tests (Applicable to all airplanes certificated as a type on or after March 15, 1947.) After proof of compliance with the structural requirements contained in this part, and upon completion of all necessary inspection and testing on the ground, and proof of the conformity of the airplane with the type design, and upon receipt from the applicant of a report of flight tests conducted by him, there shall be conducted such official flight tests as the Administrator finds necessary to determine compliance with §§ 04a.2 through 04a.91. After the conclusion of these flight tests such additional flight tests shall be conducted as the Administrator finds necessary to ascertain whether there is reasonable assurance that the airplane, its components, and equipment are reliable and function properly. The extent of such additional flight tests shall depend upon the complexity of the airplane, the number and nature of new design features, and the record of previous tests and experience for the particular airplane model, its

components, and equipment. If practicable, the flight tests performed for the purpose of ascertaining the reliability and proper functioning shall be conducted on the same airplane which was used in flight tests to show compliance with §§04a.2 through 04a.91.

By the Civil Aeronautics Board:

/s/ M. C. Mulligan

M. C. Mulligan
Secretary

(SEAL)

Part 04a (formerly 04- See C.A.R. Amendment 04-5) last printed November 1, 1943.