Regulation No. SR- 420 Affects Parts: 40, 41, 42

Distribution: General

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

> > Effective: May 21, 1957 Adopted: Mcy 21, 1957

SPECIAL CIVIL AIR REGULATION

EMERGENCY EVACUATION EQUIPMENT FOR DC-3 TYPE AIRPLANES

Sections 40.173, 41.23d, and 42.24c effective November 28, 1955, require in part that after May 31, 1957, on all passenger-carrying airplanes, at all emergency exits which are more than 6 feet from the ground with the airplane on the ground and with the landing gear extended, means shall be provided to assist the occupants in descending from the airplane. This requirement was adopted on the basis of experience which had shown that in certain instances, it is essential that some means be provided to assist passengers in evacuating airplanes on the ground.

The application of this emergency evacuation requirement to the DC-3 airplane, however, would impose an economic burden on the operators of this airplane without a commensurate increase in safety. The rear window emergency exit of this airplane is just over 6 feet from the ground, with the landing gear extended, and accordingly would require the installation of a means to assist descent. However, the main passenger door and 2 window emergency exits which are located over the wings require no special means to assist descent and they afford an excellent means of emergency evacuation. Furthermore, a study of DC-3 airplane accidents from 1938 through 1955 does not disclose any incident in which the absence of a means to assist the descent of occupants from the rear window emergency exit adversely affected the emergency evacuation of passengers. This record can be attributed in great part to the fact that the DC-3 airplane does not utilize a nose-wheel type landing gear and the probability of the rear window emergency exit being raised above its normal height from the ground, such as can occur when a nose-wheel gear collapses, is extremely remote.

Accordingly, the Board is of the view that it is not necessary in the interest of safety to require that means be provided to assist occupants in descending from the rear window emergency exit of a DC-3 airplane. It should be noted, however, that a DC-3 operator would not be prevented from installing a means to assist descent should he so desire.

Interested persons have been afforded an opportunity to participate in the making of this regulation (22 F.R. 2663), and due consideration has been given to all relevant matter presented. Since this regulation imposes no additional burden on any person, it may be made effective without prior notice.

In consideration of the foregoing, the Civil Aeronautics Board hereby makes and promulgates the following Special Civil Air Regulation, effective May 21, 1957.

Contrary provisions of \$\section{8}\$ 40.173 (e), \$\alpha\$1.23d (a), and \$\alpha\$2.24c (a) of Parts \$\alpha\$C, \$\alpha\$1, and \$\alpha\$2, respectively, of the Civil Air Regulations notwithstanding, after May 31, 1957, means need not be provided to assist the occupants of a passenger-carrying DC-3 airplane in descending from the airplane by way of the rear window emergency exit: \$\frac{\text{Provided}}{\text{contained}}\$, That the authority contained herein shall not apply to DC-3 airplanes which are operated with an occupancy greater than that specified in Special Civil Air Regulation No. \$\text{SR-389}\$ for DC-3 airplanes with \$\alpha\$ exits authorized for passenger use.

(Sec. 205 (a), 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)