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

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Civil Air Regulations Amendment 40-8

Effective: August 15, 1954
Adopted: July 9, 1954

SCHEDULED INTERSTATE AIR CARRIER CERTIFICATION AND OPERATION RULES

ANTI-COLLISION LIGHTS FOR LARGE AIRPIANES OPERATING AT NIGHT

Currently effective \$ 40,200 of Part 40 of the Civil Air Regulations requires, among other things, that all airplanes used in scheduled interstate air transportation be equipped with flashing position lights when operating at night. Recent experience has indicated that there is need for greater conspicuity than can be obtained with the existing system of flashing position lights, because of the increased speed of airplanes and the increase in the number of airplanes that operate at night. Experiments in recent years revealed that high intensity rotating lights, commonly referred to as anti-collision lights, increase conspicuity to the point where safety in air navigation can be materially improved if aircraft are equipped with such lights. In order to enable the air carriers to evaluate this and other systems of aircraft exterior lighting, the Board promulgated several Special Civil Air Regulations, the most recent of which, SR-392 is currently in effect.

After the service testing of anti-collision lights by certain air carrier operators, it appeared early in 1952 that the anti-collision lights which were then available were satisfactory to these operators as evidenced by their plans for installation on a fleet-wide basis. The Board then established a broad standard for these lights in Part 4b of the Civil Air Regulations for the purpose of assuming a reasonable degree of standardization of anti-collision lights.

Since the need for increased conspicuity of aircraft operating at night has not diminished but has been magnified by recent experience of near accidents at night, and since there are satisfactory anticollision lights available which tend to alleviate the danger of collision, the Board considers it necessary in the interest of safety that the installation of anti-collision lights on all large aircraft be made mandatory. This amendment, therefore, requires that all large air carrier airplanes used in scheduled interstate air transportation be equipped with operable anti-collision lights. Although it was proposed that this requirement become effective on September 30, 1954, the Board has been informed that in some cases it would require as long as eighteen months to effect a fleet-wide installation. Therefore, to permit an orderly installation of these lights, the effective date of this requirement has been established as June 1, 1956. Similar amendments are being made to Parts 41, 42, and 43 for all aircraft having a maximum

certificated weight of more than 12,500 pounds, and additional study is being given to the possibility of requiring generally similar types of lights for small airplanes.

Considerable concern was expressed by the air carriers with respect to the possibility that a flight may not be permitted to continue beyond a stop en route with an inoperative anti-collision light. It is expected that the air carriers will perform a high level of maintenance on the light so that failures in flight will be relatively infrequent. In view of the fact that each affected airplane will be equipped with flashing position lights and in view of the relatively few failures anticipated, it is considered that a reasonable level of safety will result if the provisions presently applicable to other required equipment becoming unserviceable is equally applicable to the anti-collision light. Accordingly, under the provisions of \$40.51, an air carrier may establish a procedure for continuation of flight beyond a stop en route if the anti-collision light becomes inoperative. In unusual circumstances, the administrator may authorize, under \$40.391, continuation of flight beyond a scheduled terminal.

It is understood that, notwithstanding the promulgation of this amendment, the air carriers have indicated their desire to continue, in conjunction with other interested parties, research and development on the overall problem of aircraft exterior lighting. In this respect, it is expected that the industry will take full advantage of Special Civil Air Regulation SR-392 which authorizes limited experimentation with exterior lighting on air carrier airplanes.

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 Givil Aeronautics Board hereby amends Part 40 of the Civil Air Regulations (14 CFR, Part 40, as amended), effective August 15, 1954:

By amending § 40.200 by redesignating paragraphs "(b)", "(c)", "(d)", "(e)", and "(f)", as paragraphs "(c)", "(d)", "(e)", "(f)", and "(g)" respectively, and by adding a new paragraph (b) to read as follows:

40.200 Instruments and equipment for operations at night. * * *

(b) After May 31, 1956, an anti-collision light for air lanes having a maximum certificated weight of more than 12,500 pounds,

(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

(SEAL)

M. C. Mulligan Secretary

This is the eighth amendment to Part 40, which became effective April 1, 1954.