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CIVIL AERONAUTICS MANUAL 3

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Civil Aeronautics Administration

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Supplement No. 9

June 8, 1951

SUBJECT: 3.682 Batteries.
3.700 Position light system installation.

The purpose of this supplement is to make available the current policy concerning the use of dry-cell batteries in aircraft and the use and location of steady red passing lights on aircraft.

3.682-1 Dry-cell batteries.
3.700-1 Red passing lights.

The attached pages should be retained in a series of similar statements that will be issued explaining or implementing Civil Air Regulation 3.

This material appeared in the Federal Register and Code of Federal Regulations on April 12, 1951 as adopted policies.

Also, please delete CAM 3.71-1 in Supplement No. 5, dated March 8, 1950, as the subject is adequately covered in CAM 3.112-1 of Supplement No. 2, dated July 18, 1949, and renumber CAM 3.71-2 to read CAM 3.71-1.


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Attachments

Distribution: AIR 1, 3, 4, 4A, 5, 8, 11, 13, 14
40 all tabs, 40B, 40C, 40D, 40E, 40-F-1

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§ 3.682 *Batteries.* When an item of electrical equipment which is essential to the safe operation of the airplane is installed, the battery required shall have sufficient capacity to supply the electrical power necessary for dependable operation of the connected electrical equipment.

§ 3.682-1 *Dry-cell batteries.* (CAA policies which apply to § 3.682). When a battery is installed to provide power for electrical equipment which is essential to the safe operation of the airplane, it should be of a type whose pre-flight state of charge can readily be determined by simple and reliable means. Dry-cell batteries are not considered to be of this type, and should not be used to supply essential electrical equipment.

§ 3.700 *Position light system installation*—(a) *General*. The provisions of §§ 3.700 through 3.703 shall be applicable to the position light system as a whole, and shall be complied with if a single circuit type system is installed.¹ The single circuit system shall include the items specified in paragraphs (b) through (f) of this section.

(b) *Forward position lights*. Forward position lights shall consist of a red and a green light spaced laterally as far apart as practicable and installed forward on the airplane in such a location that, with the airplane in normal flying position, the red light is displayed on the left side and the green light is displayed on the right side. The individual lights shall be type certificated in accordance with the applicable provisions of Part 15.

(c) *Rear position light*. The rear position light shall be a white light mounted as far aft as practicable. The light shall be type certificated in accordance with the applicable provisions of Part 15.

(d) *Circuit*. The two forward position lights and the rear position light shall constitute a single circuit.

(e) *Flasher*. If employed, an approved position light flasher for a single circuit system shall be installed. The flasher shall be such that the system is energized automatically at a rate of not less than 60 nor more than 100 flashes

per minute with an on-off ratio between 2:1 and 1:1. Unless the flasher is of a fail-safe type, means shall be provided in the system to indicate to the pilot when there is a failure of the flasher and a further means shall be provided for turning the lights on steady in the event of such failure.

(f) *Light covers and color filters*. Light covers or color filters used shall be of noncombustible material and shall be constructed so that they will not change color or shape or suffer any appreciable loss of light transmission during normal use.

§ 3.700-1 *Red passing lights (CAA policies which apply to § 3.700 (a))*. When it is desired to improve the conspicuity of the aircraft, a steady red light, commonly known as a passing light, may be installed. This light is not considered to be a position light and therefore need not be type certificated. When installed, its location should be one of the following:

- (a) Within the left landing light unit.
- (b) On the centerline of the aircraft nose.
- (c) In the leading edge of the left wing, outboard of the propeller disc.

¹ Requirements for dual circuit position light systems are contained in Part 4b.