

$$I_e = \frac{\int_{t_1}^{t_2} I(t) dt}{0.2 + (t_2 - t_1)}$$

where:

I_e =effective intensity (candles).

$I(t)$ =instantaneous intensity as a function of time.

$t_2 - t_1$ =flash time interval (seconds).

Normally, the maximum value of effective intensity is obtained when t_2 and t_1 are chosen so that the effective intensity is equal to the instantaneous intensity at t_2 and t_1 .

(f) *Minimum effective intensities for anticollision lights.* Each anticollision light effective intensity must equal or exceed the applicable values in the following table.

| Angle above or below the horizontal plane | Effective intensity (candles) |
|---|-------------------------------|
| 0° to 5° | 400 |
| 5° to 10° | 240 |
| 10° to 20° | 80 |
| 20° to 30° | 40 |
| 30° to 75° | 20 |

[Doc. No. 4080, 29 FR 17955, Dec. 18, 1964, as amended by Amdt. 23-11, 36 FR 12972, July 10, 1971; Amdt. 23-20, 42 FR 36969, July 18, 1977; Amdt. 23-49, 61 FR 5169, Feb. 9, 1996]

SAFETY EQUIPMENT

§ 23.1411 General.

(a) Required safety equipment to be used by the flight crew in an emergency, such as automatic liferaft releases, must be readily accessible.

(b) Stowage provisions for required safety equipment must be furnished and must—

(1) Be arranged so that the equipment is directly accessible and its location is obvious; and

(2) Protect the safety equipment from damage caused by being subjected to the inertia loads resulting from the ultimate static load factors specified in § 23.561(b)(3) of this part.

[Amdt. 23-17, 41 FR 55465, Dec. 20, 1976, as amended by Amdt. 23-36, 53 FR 30815, Aug. 15, 1988]

§ 23.1415 Ditching equipment.

(a) Emergency flotation and signaling equipment required by any oper-

ating rule in this chapter must be installed so that it is readily available to the crew and passengers.

(b) Each raft and each life preserver must be approved.

(c) Each raft released automatically or by the pilot must be attached to the airplane by a line to keep it alongside the airplane. This line must be weak enough to break before submerging the empty raft to which it is attached.

(d) Each signaling device required by any operating rule in this chapter, must be accessible, function satisfactorily, and must be free of any hazard in its operation.

§ 23.1416 Pneumatic de-icer boot system.

If certification with ice protection provisions is desired and a pneumatic de-icer boot system is installed—

(a) The system must meet the requirements specified in § 23.1419.

(b) The system and its components must be designed to perform their intended function under any normal system operating temperature or pressure, and

(c) Means to indicate to the flight crew that the pneumatic de-icer boot system is receiving adequate pressure and is functioning normally must be provided.

[Amdt. 23-23, 43 FR 50593, Oct. 30, 1978]

§ 23.1419 Ice protection.

If certification with ice protection provisions is desired, compliance with the requirements of this section and other applicable sections of this part must be shown:

(a) An analysis must be performed to establish, on the basis of the airplane's operational needs, the adequacy of the ice protection system for the various components of the airplane. In addition, tests of the ice protection system must be conducted to demonstrate that the airplane is capable of operating safely in continuous maximum and intermittent maximum icing conditions, as described in appendix C of part 25 of this chapter. As used in this section, "Capable of operating safely," means that airplane performance, controllability, maneuverability, and stability must not be less than that required in part 23, subpart B.