seat configuration of 10–19 seats unless that airplane complies with the smoke detector system requirements described in paragraph (a) of this section, except that the smoke detector system or equivalent must provide a warning light in the cockpit or an audio warning that would be readily detected by the flightcrew.

42. Section 121.309 is amended by revising paragraphs (c)(7), (d)(1), and (e)

to read as follows:

§121.309 Emergency equipment.

(c) * * * * *

(7) At least two of the required hand fire extinguisher installed in passenger-carrying airplanes must contain Halon 1211 (bromochlorofluoromethane) or equivalent as the extinguishing agent. At least one hand fire extinguisher in the passenger compartment must contain Halon 1211 or equivalent.

* * * * *

- (d) First aid and emergency medical equipment and protective gloves. (1) For treatment of injuries or medical emergencies that might occur during flight time or in minor accidents each passenger-carrying airplane must have the following equipment that meets the specifications and requirements of appendix A of this part:
- (i) Approved first aid kits; and (ii) In airplanes for which a flight attendant is required, an emergency medical kit.

* * * * *

- (e) *Crash ax.* Except for nontransport category airplanes type certificated after December 31, 1964, each airplane must be equipped with a crash ax.
- 43. Section 121.310 is amended by revising paragraphs (d)(1), (2), (3), and (4) and (l) and revising the introductory text of paragraphs (c), (f), (h)(1) and (k) to read as follows:

121.310 Additional emergency equipment.

(c) Lighting for interior emergency exit markings. Except for nontransport category airplanes type certificated after December 31, 1964, each passenger-carrying airplane must have an emergency lighting system, independent of the main lighting system. However, sources of general cabin illumination may be common to both the emergency and the main lighting systems if the power supply to the emergency lighting system is independent of the power supply to the main lighting system.

The emergency lighting system must—

* * * * *

(d) * * *

(1) Each light must—

(i) Be operable manually both from the flightcrew station and, for airplanes on which a flight attendant is required, from a point in the passenger compartment that is readily accessible to a normal flight attendant seat;

(ii) Have a means to prevent inadvertent operation of the manual

controls; and

(iii) When armed or turned on at either station, remain lighted or become lighted upon interruption of the airplane's normal electric power.

(2) Each light must be armed or turned on during taxiing, takeoff, and landing. In showing compliance with this paragraph a transverse vertical separation of the fuselage need not be considered.

(3) Each light must provide the required level of illumination for at least 10 minutes at the critical ambient conditions after emergency landing.

(4) Each light must have a cockpit control device that has an "on," "off,"

and ''armed'' position.

(f) Emergency exit access. Access to emergency exits must be provided as follows for each passenger-carrying transport category airplane:

* * * * *

(h) * * *

- (1) Except for nontransport category airplanes certificated after December 31, 1964, each passenger-carrying airplane must be equipped with exterior lighting that meets the following requirements:
- (k) On each large passenger-carrying turbojet-powered airplane, each ventral exit and tailcone exit must be—
- (l) Portable lights. No person may operate a passenger-carrying airplane unless it is equipped with flashlight stowage provisions accessible from each flight attendant seat.

44. Section 121.311 is amended by revising the first sentence of the introductory text of paragraph (e), by adding a new paragraph (e)(3), by

adding a new paragraph (e)(3), by revising the introductory text of paragraph (f), and by revising paragraph (h) to read as follows:

(h) to read as follows:

§ 121.311 Seats, safety belts, and shoulder harnesses.

* * * * *

(e) Except as provided in paragraphs (e)(1) through (e)(3) of this section, no certificate holder may take off or land an airplane unless each passenger seat back is in the upright position. * **

* * * * *

- (3) On airplanes with no flight attendant, the certificate holder may take off or land as long as the flightcrew instructs each passenger to place his or her seat back in the upright position for takeoff and landing.
- (f) No person may operate a transport category airplane that was type certificated after January 1, 1958, or a nontransport category airplane manufactured after March 20, 1997, unless it is equipped at each flight deck station with a combined safety belt and shoulder harness that meets the applicable requirements specified in § 25.785 of this chapter, effective March 6, 1980, except that—

(h) Each occupant of a seat equipped with a shoulder harness or with a combined safety belt and shoulder harness must have the shoulder harness or combined safety belt and shoulder harness properly secured about that occupant during takeoff and landing, except that a shoulder harness that is not combined with a safety belt may be unfastened if the occupant cannot perform the required duties with the shoulder harness fastened.

* * * * *

45. Section 121.312 is revised to read as follows:

§ 121.312 Materials for compartment interiors.

- (a) All interior materials; transport category airplanes and nontransport category airplanes type certificated before January 1, 1965. Except for the materials covered by paragraph (b) of this section, all materials in each compartment of a transport category airplane, or a nontransport category airplane type certificated before January 1, 1965, used by the crewmembers and passengers, must meet the requirements of § 25.853 of this chapter in effect as follows, or later amendment thereto:
- (1) Airplane with passenger seating capacity of 20 or more.
- (i) Manufactured after August 19, 1988, but prior to August 20, 1990. Except as provided in paragraph (a)(3)(ii) of this section, each airplane with a passenger capacity of 20 or more and manufactured after August 19, 1988, but prior to August 20, 1990, must comply with the heat release rate testing provisions of § 25.853(d) in effect March 6, 1995 (formerly § 25.853(a-1) in effect on August 20, 1986) (see App. L of this part), except that the total heat release over the first 2 minutes of sample exposure must not exceed 100 kilowatt minutes per square meter and the peak heat release rate must not exceed 100 kilowatts per square meter.