

**§ 139.309 Safety areas.**

(a) To the extent practicable, each certificate holder shall provide and maintain for each runway and taxiway which is available for air carrier use—

(1) If the runway or taxiway had a safety area on December 31, 1987, and if no reconstruction or significant expansion of the runway or taxiway was begun on or after January 1, 1988, a safety area of at least the dimensions that existed on December 31, 1987; or

(2) If construction, reconstruction, or significant expansion of the runway or taxiway began on or after January 1, 1988, a safety area which conforms to the dimensions acceptable to the Administrator at the time construction, reconstruction, or expansion began.

(b) Each certificate holder shall maintain its safety areas as follows:

(1) Each safety area shall be cleared and graded, and have no potentially hazardous ruts, humps, depressions, or other surface variations.

(2) Each safety area shall be drained by grading or storm sewers to prevent water accumulation.

(3) Each safety area shall be capable under dry conditions of supporting snow removal equipment, and aircraft rescue and firefighting equipment, and supporting the occasional passage of aircraft without causing major damage to the aircraft.

(4) No object may be located in any safety area, except for objects that need to be located in a safety area because of their function. These objects shall be constructed, to the extent practical, on frangibly mounted structures of the lowest practical height with the frangible point no higher than 3 inches above grade.

(c) FAA Advisory Circulars in the 150 series contain standards and procedures for the configuration and maintenance of safety areas acceptable to the Administrator.

**§ 139.311 Marking and lighting.**

(a) Each certificate holder shall provide and maintain at least the following marking systems for air carrier operations on the airport:

(1) Runway markings meeting the specifications for the approach with the lowest minimums authorized for each runway.

(2) Taxiway centerline and edge markings.

(3) Signs identifying taxiing routes on the movement area.

(4) Runway holding position markings and signs.

(5) ILS critical area markings and signs.

(b) Each certificate holder shall provide and maintain, when the airport is open during hours of darkness or during conditions below VFR minimums, at least the following lighting systems for air carrier operations on the airport:

(1) Runway lighting meeting the specifications for the approach with the lowest minimums authorized for each runway.

(2) One of the following taxiway lighting systems:

(i) Centerline lights.

(ii) Centerline reflectors.

(iii) Edge lights.

(iv) Edge reflectors.

(3) An airport beacon.

(4) Approach lighting meeting the specifications for the approach with the lowest minimums authorized for each runway, unless otherwise provided and maintained by the FAA or another agency.

(5) Obstruction marking and lighting, as appropriate, on each object within its authority which constitutes an obstruction under part 77 of this chapter. However, this lighting and marking is not required if it is determined to be unnecessary by an FAA aeronautical study.

(c) Each certificate holder shall properly maintain each marking or lighting system installed on the airport which is owned by the certificate holder. As used in this section, to “properly maintain” includes: To clean, replace, or repair any faded, missing, or nonfunctional item of lighting; to keep each item unobscured and clearly visible; and to ensure that each item provides an accurate reference to the user.

(d) Each certificate holder shall ensure that all lighting on the airport, including that for aprons, vehicle parking areas, roadways, fuel storage areas, and buildings, is adequately adjusted or shielded to prevent interference with air traffic control and aircraft operations.

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(e) FAA Advisory Circulars in the 150 series contain standards and procedures for equipment, material, installation, and maintenance of light systems and marking listed in this section which are acceptable to the Administrator.

(f) Notwithstanding paragraph (a) of this section, a certificate holder is not required to provide the identified signs in paragraph (a)(3) of this section until January 1, 1995. Each certificate holder shall maintain each marking system that meets paragraph (a)(3) of this section.

[Doc. No. 24812, 52 FR 44282, Nov. 18, 1987, as amended by Amdt. 139-15, 53 FR 40843, Oct. 18, 1988; Amdt. 139-19, 57 FR 15164, Apr. 24, 1992; Amdt. 139-20, 59 FR 7120, Feb. 14, 1994]

### § 139.313 Snow and ice control.

(a) Each certificate holder whose airport is located where snow and icing conditions regularly occur shall prepare, maintain, and carry out a snow and ice control plan.

(b) The snow and ice control plan required by this section shall include instructions and procedures for—

(1) Prompt removal or control, as completely as practical, of snow, ice, and slush on each movement area;

(2) Positioning snow off of movement area surfaces so that all air carrier aircraft propellers, engine pods, rotors, and wingtips will clear any snowdrift and snowbank as the aircraft's landing gear traverses any full strength portion of the movement area;

(3) Selection and application of approved materials for snow and ice control to ensure that they adhere to snow and ice sufficiently to minimize engine ingestion;

(4) Timely commencement of snow and ice control operations; and

(5) Prompt notification, in accordance with §139.339, of all air carriers using the airport when any portion of the movement area normally available to them is less than satisfactorily cleared for safe operation by their aircraft.

(c) FAA Advisory Circulars in the 150 series contain standards for snow and ice control equipment, materials, and procedures for snow and ice control

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which are acceptable to the Administrator.

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### § 139.315 Aircraft rescue and fire-fighting: Index determination.

(a) An Index is required by paragraph (c) of this section for each certificate holder. The Index is determined by a combination of—

(1) The length of air carrier aircraft expressed in groups; and

(2) Average daily departures of air carrier aircraft.

(b) For the purpose of Index determination, air carrier aircraft lengths are grouped as follows:

(1) Index A includes aircraft less than 90 feet in length.

(2) Index B includes aircraft at least 90 feet but less than 126 feet in length.

(3) Index C includes aircraft at least 126 feet but less than 159 feet in length.

(4) Index D includes aircraft at least 159 feet but less than 200 feet in length.

(5) Index E includes aircraft at least 200 feet in length.

(c) Except as provided in §139.319(c), the Index required by §139.319 is determined as follows:

(1) If there are five or more average daily departures of air carrier aircraft in a single Index group serving that airport, the longest Index group with an average of 5 or more daily departures is the Index required for the airport.

(2) If there are less than five average daily departures of air carrier aircraft in a single Index group serving that airport, the next lower Index from the longest Index group with air carrier aircraft in it is the Index required for the airport. The minimum designated Index shall be Index A.

### § 139.317 Aircraft rescue and fire-fighting: Equipment and agents.

The following rescue and firefighting equipment and agents are the minimum required for the Indexes referred to in §139.315:

(a) *Index A*: One vehicle carrying at least—

(1) 500 pounds of sodium-based dry chemical or halon 1211; or