The operator shall activate the appropriate devices required by paragraphs (a) (1) and (2) of this section when weather conditions are less than those prescribed for operation under this subpart, or if a malfunction or any other reason makes the further operation hazardous to other air traffic or to persons and property on the surface.

- (b) No person may operate an unmanned free balloon below 60,000 feet standard pressure altitude between sunset and sunrise (as corrected to the altitude of operation) unless the balloon and its attachments and payload, whether or not they become separated during the operation, are equipped with lights that are visible for at least 5 miles and have a flash frequency of at least 40, and not more than 100, cycles per minute.
- (c) No person may operate an unmanned free balloon that is equipped with a trailing antenna that requires an impact force of more than 50 pounds to break it at any point, unless the antenna has colored pennants or streamers that are attached at not more than 50 foot intervals and that are visible for at least one mile.
- (d) No person may operate between sunrise and sunset an unmanned free balloon that is equipped with a suspension device (other than a highly conspicuously colored open parachute) more than 50 feet along, unless the suspension device is colored in alternate bands of high conspicuity colors or has colored pennants or streamers attached which are visible for at least one mile.

(Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1457, 29 FR 47, Jan. 3, 1964, as amended by Amdt. 101–2, 32 FR 5254, Mar. 29, 1967; Amdt. 101–4, 39 FR 22252, June 21, 1974]

## § 101.37 Notice requirements.

- (a) Prelaunch notice: Except as provided in paragraph (b) of this section, no person may operate an unmanned free balloon unless, within 6 to 24 hours before beginning the operation, he gives the following information to the FAA ATC facility that is nearest to the place of intended operation:
  - (1) The balloon identification.
- (2) The estimated date and time of launching, amended as necessary to remain within plus or minus 30 minutes.

- (3) The location of the launching site.
- (4) The cruising altitude.
- (5) The forecast trajectory and estimated time to cruising altitude or 60,000 feet standard pressure altitude, whichever is lower.
- (6) The length and diameter of the balloon, length of the suspension device, weight of the payload, and length of the trailing antenna.
  - (7) The duration of flight.
- (8) The forecast time and location of impact with the surface of the earth.
- (b) For solar or cosmic disturbance investigations involving a critical time element, the information in paragraph (a) of this section shall be given within 30 minutes to 24 hours before beginning the operation.
- (c) Cancellation notice: If the operation is canceled, the person who intended to conduct the operation shall immediately notify the nearest FAA ATC facility.
- (d) Launch notice: Each person operating an unmanned free balloon shall notify the nearest FAA or military ATC facility of the launch time immediately after the balloon is launched.

#### § 101.39 Balloon position reports.

- (a) Each person operating an unmanned free balloon shall:
- (1) Unless ATC requires otherwise, monitor the course of the balloon and record its position at least every two hours; and
- (2) Forward any balloon position reports requested by ATC.
- (b) One hour before beginning descent, each person operating an unmanned free balloon shall forward to the nearest FAA ATC facility the following information regarding the balloon:
  - (1) The current geographical position.
  - (2) The altitude.
- (3) The forecast time of penetration of 60,000 feet standard pressure altitude (if applicable).
- (4) The forecast trajectory for the balance of the flight.
- (5) The forecast time and location of impact with the surface of the earth.
- (c) If a balloon position report is not recorded for any two-hour period of flight, the person operating an unmanned free balloon shall immediately notify the nearest FAA ATC facility.

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The notice shall include the last recorded position and any revision of the forecast trajectory. The nearest FAA ATC facility shall be notified immediately when tracking of the balloon is re-established.

(d) Each person operating an unmanned free balloon shall notify the nearest FAA ATC facility when the operation is ended.

### PART 103—ULTRALIGHT VEHICLES

#### Subpart A—General

Sec.

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103.21 Visual reference with the surface.

103.23 Flight visibility and cloud clearance requirements.

AUTHORITY: 49 U.S.C. 106(g), 40103-40104, 40113, 44701.

Source: Docket No. 21631, 47 FR 38776, Sept. 2, 1982, unless otherwise noted.

## Subpart A—General

# § 103.1 Applicability.

This part prescribes rules governing the operation of ultralight vehicles in the United States. For the purposes of this part, an ultralight vehicle is a vehicle that:

- (a) Is used or intended to be used for manned operation in the air by a single occupant;
- (b) Is used or intended to be used for recreation or sport purposes only;
- (c) Does not have any U.S. or foreign airworthiness certificate; and
- (d) If unpowered, weighs less than 155 pounds; or
  - (e) If powered:

- (1) Weighs less than 254 pounds empty weight, excluding floats and safety devices which are intended for deployment in a potentially catastrophic situation:
- (2) Has a fuel capacity not exceeding 5 U.S. gallons;
- (3) Is not capable of more than 55 knots calibrated airspeed at full power in level flight; and
- (4) Has a power-off stall speed which does not exceed 24 knots calibrated air-

#### § 103.3 Inspection requirements.

- (a) Any person operating an ultralight vehicle under this part shall, upon request, allow the Administrator. or his designee, to inspect the vehicle to determine the applicability of this
- (b) The pilot or operator of an ultralight vehicle must, upon request of the Administrator, furnish satisfactory evidence that the vehicle is subject only to the provisions of this part.

#### § 103.5 Waivers.

No person may conduct operations that require a deviation from this part except under a written waiver issued by the Administrator.

### § 103.7 Certification and registration.

- (a) Notwithstanding any other section pertaining to certification of aircraft or their parts or equipment, ultralight vehicles and their component parts and equipment are not required to meet the airworthiness certification standards specified for aircraft or to have certificates of airworthiness.
- (b) Notwithstanding any other section pertaining to airman certification, operators of ultralight vehicles are not required to meet any aeronautical knowledge, age, or experience requirements to operate those vehicles or to have airman or medical certificates.
- (c) Notwithstanding any other section pertaining to registration and marking of aircraft, ultralight vehicles are not required to be registered or to bear markings of any type.