## § 101.13 Operating limitations.

(a) Except as provided in paragraph (b) of this section, no person may operate a moored balloon or kite-
(1) Less than 500 feet from the base of any cloud;
(2) More than 500 feet above the surface of the earth;
(3) From an area where the ground visibility is less than three miles; or
(4) Within five miles of the boundary of any airport.
(b) Paragraph (a) of this section does not apply to the operation of a balloon or kite below the top of any structure and within 250 feet of it, if that shielded operation does not obscure any lighting on the structure.

## § 101.15 Notice requirements.

No person may operate an unshielded moored balloon or kite more than 150 feet above the surface of the earth unless, at least 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:
(a) The names and addresses of the owners and operators.
(b) The size of the balloon or the size and weight of the kite.
(c) The location of the operation.
(d) The height above the surface of the earth at which the balloon or kite is to be operated.
(e) The date, time, and duration of the operation.

## § 101.17 Lighting and marking require-

 ments.(a) No person may operate a moored balloon or kite, between sunset and sunrise unless the balloon or kite, and its mooring lines, are lighted so as to give a visual warning equal to that required for obstructions to air navigation in the FAA publication "Obstruction Marking and Lighting',.
(b) No person may operate a moored balloon or kite between sunrise and sunset unless its mooring lines have colored pennants or streamers attached at not more than 50 foot intervals beginning at 150 feet above the surface of
the earth and visible for at least one mile.
(Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))
[Doc. No. 1580, 28 FR 6722, June 29, 1963, as amended by Amdt. 101-4, 39 FR 22252, June 21, 1974]

## § 101.19 Rapid deflation device.

No person may operate a moored balloon unless it has a device that will automatically and rapidly deflate the balloon if it escapes from its moorings. If the device does not function properly, the operator shall immediately notify the nearest ATC facility of the location and time of the escape and the estimated flight path of the balloon.

## Subpart C-Unmanned Rockets

## § 101.21 Applicability.

This subpart applies to the operation of unmanned rockets. However, a person operating an unmanned rocket within a restricted area must comply only with §101.23(g) and with additional limitations imposed by the using or controlling agency, as appropriate.
[Doc. No. 1580, 28 FR 6722, June 29, 1963]
§ 101.22 Special provisions for large model rockets.

Persons operating model rockets that use not more than 125 grams of propellant; that are made of paper, wood, or breakable plastic; that contain no substantial metal parts, and that weigh not more than 1,500 grams, including the propellant, need not comply with § 101.23 (b), (c), (g), and (h), provided:
(a) That person complies with all provisions of §101.25; and
(b) The operation is not conducted within 5 miles of an airport runway or other landing area unless the information required in $\S 101.25$ is also provided to the manager of that airport.
[Amdt. 101-6, 59 FR 50393, Oct. 3, 1994]

## § 101.23 Operating limitations.

No person may operate an unmanned rocket-
(a) In a manner that creates a collision hazard with other aircraft;
(b) In controlled airspace;
(c) Within five miles of the boundary of any airport;
(d) At any altitude where clouds or obscuring phenomena of more than five-tenths coverage prevails;
(e) At any altitude where the horizontal visibility is less than five miles;
(f) Into any cloud;
(g) Within 1,500 feet of any person or property that is not associated with the operations; or
(h) Between sunset and sunrise.
(Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))
[Doc. No. 1580, 28 FR 6722, June 29, 1963, as amended by Amdt. 101-4, 39 FR 22252, June 21, 1974]

## § 101.25 Notice requirements.

No person may operate an unmanned rocket unless that person gives the following information to the FAA ATC facility nearest to the place of intended operation no less than 24 hours prior to and no more than 48 hours prior to beginning the operation:
(a) The names and addresses of the operators; except when there are multiple participants at a single event, the name and address of the person so designated as the event launch coordinator, whose duties include coordination of the required launch data estimates and coordinating the launch event;
(b) The estimated number of rockets to be operated;
(c) The estimated size and the estimated weight of each rocket; and
(d) The estimated highest altitude or flight level to which each rocket will be operated.
(e) The location of the operation.
(f) The date, time, and duration of the operation.
(g) Any other pertinent information requested by the ATC facility.
[Doc. No. 1580, 28 FR 6722, June 29, 1963, as amended by Amdt. 101-6, 59 FR 50393, Oct. 3, 1994]

## Subpart D—Unmanned Free Balloons

Source: Docket No. 1457, 29 FR 47, Jan. 3, 1964, unless otherwise noted.

## § 101.31 Applicability.

This subpart applies to the operation of unmanned free balloons. However, a person operating an unmanned free balloon within a restricted area must comply only with $\S 101.33$ (d) and (e) and with any additional limitations that are imposed by the using or controlling agency, as appropriate.

## § 101.33 Operating limitations.

No person may operate an unmanned free balloon-
(a) Unless otherwise authorized by ATC, below 2,000 feet above the surface within the lateral boundaries of the surface areas of Class B, Class C, Class D, or Class E airspace designated for an airport;
(b) At any altitude where there are clouds or obscuring phenomena of more than five-tenths coverage;
(c) At any altitude below 60,000 feet standard pressure altitude where the horizontal visibility is less than five miles;
(d) During the first 1,000 feet of ascent, over a congested area of a city, town, or settlement or an open-air assembly of persons not associated with the operation; or
(e) In such a manner that impact of the balloon, or part thereof including its payload, with the surface creates a hazard to persons or property not associated with the operation.
[Doc. No. 1457, 29 FR 47, Jan. 3, 1964, as amended by Amdt. 101-5, 56 FR 65662, Dec. 17, 1991]
§ 101.35 Equipment and marking requirements.
(a) No person may operate an unmanned free balloon unless-
(1) It is equipped with at least two payload cut-down systems or devices that operate independently of each other;
(2) At least two methods, systems, devices, or combinations thereof, that function independently of each other, are employed for terminating the flight of the balloon envelope; and
(3) The balloon envelope is equipped with a radar reflective device(s) or material that will present an echo to surface radar operating in the 200 MHz to 2700 MHz frequency range.

