

§ 17.49

(b) An extinguishment or improper functioning of a steady burning side intermediate light or lights, shall be corrected as soon as practicable, but notification to the FAA of such extinguishment or improper functioning is not required.

[32 FR 11273, Aug. 3, 1967, as amended at 39 FR 26157, July 17, 1974; 40 FR 30267, July 18, 1975; 61 FR 4364, Feb. 6, 1996; 79 FR 56986, Sept. 24, 2014]

**§ 17.49 Recording of antenna structure light inspections in the owner record.**

The owner of each antenna structure which is registered with the Commission and has been assigned lighting specifications referenced in this part must maintain a record of any observed or otherwise known extinguishment or improper functioning of a structure light. This record shall be retained for a period of two years and provided to the FCC or its agents upon request. The record shall include the following information for each such event:

- (a) The nature of such extinguishment or improper functioning.
- (b) The date and time the extinguishment or improper operation was observed or otherwise noted.
- (c) Date and time of FAA notification, if applicable.
- (d) The date, time and nature of adjustments, repairs, or replacements made.

[48 FR 38477, Aug. 24, 1983, as amended at 61 FR 4364, Feb. 6, 1996; 79 FR 56987, Sept. 24, 2014]

**§ 17.50 Cleaning and repainting.**

Antenna structures requiring painting under this part shall be cleaned or repainted as often as necessary to maintain good visibility. Evaluation of the current paint status shall be made by using the FAA's In-Service Aviation Orange Tolerance Chart. This chart is based upon the color requirements contained in the National Bureau of Standards Report NBSIR 75-663, Color Requirements for the Marking of Obstructions.

[79 FR 56987, Sept. 24, 2014]

**§ 17.51 [Reserved]**

**§ 17.53 Lighting equipment and paint.**

The lighting equipment, color or filters, and shade of paint referred to in the specifications are further defined in the following government and/or Army-Navy aeronautical specifications, bulletins, and drawings (lamps are referred to by standard numbers):

|   |  |
|---|--|
| Outside white .....                     | TT-P-102 <sup>1</sup> (Color No. 17875, FS-595).                   |
| Aviation surface orange .....           | TT-P-59 <sup>1</sup> (Color No. 12197, FS-595).                    |
| Aviation surface orange, enamel.        | TT-E-489 <sup>1</sup> (Color No. 12197, FS-595).                   |
| Aviation red obstruction light—color.   | MIL-C-25050 <sup>2</sup> .   |
| Flashing beacons .....                  | CAA-446 <sup>3</sup> Code Beacons, 300 mm. MIL-6273 <sup>2</sup> . |
| Do .....                                | L-810 <sup>3</sup> (FAA AC No. 150/5345-2 <sup>4</sup> ).          |
| Double and single obstruction light.    | MIL-L-7830 <sup>2</sup> .  |
| Do .....                                | FAA/DOD L-856 (FAA AC No. 150/5345-43B <sup>4</sup> ).             |
| High intensity white obstruction light. | No. 116 A21/TS (6,000 h).  |
| 116-Watt lamp .....                     | No. 125 A21/TS (6,000 h).  |
| 125-Watt lamp .....                     | No. 620 PS-40 (3,000 h).   |
| 620-Watt lamp .....                     | No. 700 PS-40 (6,000 h).   |
| 700-Watt lamp .....                     |  |

<sup>1</sup>Copies of this specification can be obtained from the Specification Activity, Building 197, Room 301, Naval Weapons Plant, 1st and N Streets, SE., Washington, D.C. 20407.

<sup>2</sup>Copies of Military specifications can be obtained by contacting the Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Ave., Attention: NPPC-105, Philadelphia, Pa. 19120.

<sup>3</sup>Copies of Federal Aviation Administration specifications may be obtained from the Chief, Configuration Control Branch, AAF-110, Department of Transportation, Federal Aviation Administration, 800 Independence Avenue SW., Washington, D.C. 20591.

<sup>4</sup>Copies of Federal Aviation Administration advisory circulars may be obtained from the Department of Transportation, Publications Section, TAD-443.1, 400 7th St. SW., Washington, D.C. 20590.

[33 FR 11540, Aug. 14, 1968, as amended at 40 FR 30267, July 18, 1975]

**§ 17.54 Rated lamp voltage.**

To insure the necessary lumen output by obstruction lights, the rated voltage of incandescent lamps used shall correspond to be within 3 percent higher than the voltage across the lamp socket during the normal hours of operation.

[42 FR 54826, Oct. 11, 1977]

**§ 17.56 Maintenance of lighting equipment.**

Replacing or repairing of lights, automatic indicators or automatic control or alarm systems shall be accomplished as soon as practicable.

[79 FR 56986, Sept. 24, 2014]

**§ 17.57 Report of radio transmitting antenna construction, alteration, and/or removal.**

The owner of an antenna structure for which an Antenna Structure Registration Number has been obtained must notify the Commission within 5 days of completion of construction (FCC Form 854-R) and/or dismantlement (FCC Form 854). The owner must also notify the Commission within 5 days of any change in structure height or change in ownership information (FCC Form 854).

[79 FR 56987, Sept. 24, 2014]

**§ 17.58 [Reserved]**

**PART 18—INDUSTRIAL, SCIENTIFIC, AND MEDICAL EQUIPMENT**

**Subpart A—General Information**

Sec.

- 18.101 Basis and purpose.
- 18.107 Definitions.
- 18.109 General technical requirements.
- 18.111 General operating conditions.
- 18.113 Inspection by Commission representatives.
- 18.115 Elimination and investigation of harmful interference.
- 18.117 Report of interference investigation.
- 18.121 Exemptions.

**Subpart B—Applications and Authorizations**

- 18.201 Scope.
- 18.203 Equipment authorization.
- 18.207 Technical report.
- 18.209 Identification of authorized equipment.
- 18.211 Multiple listing of equipment.
- 18.212 Compliance information.
- 18.213 Information to the user.

**Subpart C—Technical Standards**

- 18.301 Operating frequencies.
- 18.303 Prohibited frequency bands.
- 18.305 Field strength limits.
- 18.307 Conduction limits.
- 18.309 Frequency range of measurements.
- 18.311 Methods of measurement.
- 18.313 Radio frequency exposure requirements.

AUTHORITY: 47 U.S.C. 154, 301, 302, 303, 304, 307.

SOURCE: 50 FR 36067, Sept. 5, 1985, unless otherwise noted.

**Subpart A—General Information**

**§ 18.101 Basis and purpose.**

The rules in this part, in accordance with the applicable treaties and agreements to which the United States is a party, are promulgated pursuant to section 302 of the Communications Act of 1934, as amended, vesting the Federal Communications Commission with authority to regulate industrial, scientific, and medical equipment (ISM) that emits electromagnetic energy on frequencies within the radio frequency spectrum in order to prevent harmful interference to authorized radio communication services. This part sets forth the conditions under which the equipment in question may be operated.

**§ 18.107 Definitions.**

(a) *Radio frequency (RF) energy.* Electromagnetic energy at any frequency in the radio spectrum from 9 kHz to 3 THz (3,000 GHz).

(b) *Harmful interference.* Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with this chapter.

(c) *Industrial, scientific, and medical (ISM) equipment.* Equipment or appliances designed to generate and use locally RF energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunication. Typical ISM applications are the production of physical, biological, or chemical effects such as heating, ionization of gases, mechanical vibrations, hair removal and acceleration of charged particles.

(d) *Industrial heating equipment.* A category of ISM equipment used for or in connection with industrial heating operations utilized in a manufacturing or production process.

(e) *Medical diathermy equipment.* A category of ISM equipment used for therapeutic purposes, not including surgical diathermy apparatus designed for intermittent operation with low power.

(f) *Ultrasonic equipment.* A category of ISM equipment in which the RF energy is used to excite or drive an