§ 74.643

(2) New periscope antenna systems will be authorized upon a certification that the radiation, in a horizontal plane, from an illuminating antenna and reflector combination meets or exceeds the antenna standards of this section. This provision similarly applies to auxiliary repeaters employed to redirect or repeat the signal from a station’s directional antenna system.

(3) The choice of receiving antennas is left to the discretion of the licensee. However, licensees will not be protected from interference which results from the use of antennas with poorer performance than identified in the table of this section.

(4) [Reserved]

(5) Pickup stations are not subject to the performance standards herein stated.

(b) All fixed stations are to use antenna systems in conformance with the standards of this section. TV auxiliary broadcast stations are considered to be located in an area subject to frequency congestion and must employ a Category A antenna when:

(1) A showing by an applicant of a new TV auxiliary broadcast station or Cable Television Relay Service (CARS) station, which shares the 12.7–13.20 GHz band with TV auxiliary broadcast, indicates that use of a category B antenna limits a proposed project because of interference, and

(2) That use of a category A antenna will remedy the interference thus allowing the project to be realized.

(c) As an exception to the provisions of this section, the FCC may approve requests for use of periscope antenna systems where a persuasive showing is made that:

(1) Indicates in detail why an antenna system complying with the requirements of paragraph (a) of this section cannot be installed, and

(2) Includes a statement indicating that frequency coordination as required in §74.604 (a) was accomplished.


§ 74.643 Interference to geostationary-satellites.

Applicants and licensees must comply with §101.145 of this chapter to minimize the potential of interference to geostationary-satellites.

[68 FR 12771, Mar. 17, 2003]

§ 74.644 Minimum path lengths for fixed links.

(a) The distance between end points of a fixed link must equal or exceed the value set forth in the table below or the EIRP must be reduced in accordance with the equation set forth below.

<table>
<thead>
<tr>
<th>Frequency band (MHz)</th>
<th>Minimum path length (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 1.990</td>
<td>n/a</td>
</tr>
<tr>
<td>1,990–7,125</td>
<td>17</td>
</tr>
<tr>
<td>12,200–13,250</td>
<td>5</td>
</tr>
<tr>
<td>Above 17,700</td>
<td>n/a</td>
</tr>
</tbody>
</table>

(b) For paths shorter than those specified in the Table, the EIRP shall not exceed the value derived from the following equation.

\[ \text{EIRP} = \text{MAXEIRP} - 40 \log(A/B) \text{ dBW} \]

Where:

\[ \text{EIRP} = \text{The new maximum EIRP (equivalent isotropically radiated power) in dBW.} \]

\[ \text{MAXEIRP} = \text{Maximum EIRP as set forth in the Table of §74.636 of this part.} \]

\[ A = \text{Minimum path length from the Table above for the frequency band in kilometers.} \]

\[ B = \text{The actual path length in kilometers.} \]

\[ \text{NOTE 1 TO PARAGRAPH (b): For transmitters using Automatic Transmitter Power Control, EIRP corresponds to the maximum} \]
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§ 74.655 Authorization of equipment.

(a) Except as provided in paragraph (b) of this section, all transmitting equipment first marketed for use under this subpart or placed into service after October 1, 1981, must be authorized under the certification or verification procedure, as detailed in paragraph (f) of this section. Equipment which is used at a station licensed prior to October 1, 1985, which has not been authorized as detailed in paragraph (f) of this section, may continue to be used by the licensee or its successors or assignees, provided that if operation of such equipment causes harmful interference due to its failure to comply with the technical standards set forth in this subpart, the FCC may, at its discretion, require the licensee to take such corrective action as is necessary to eliminate the interference. However, such equipment may not be further marketed or reused under part 74 after October 1, 1985.

(b) Certification or verification is not required for transmitters used in conjunction with TV pickup stations operating with a peak output power not greater than 250 mW. Pickup stations operating in excess of 250 mW licensed pursuant to applications accepted for filing prior to October 1, 1980 may continue operation subject to periodic renewal. If operation of such equipment causes harmful interference the FCC may, at its discretion, require the licensee to take such corrective action as is necessary to eliminate the interference.

(c) The license of a TV auxiliary station may replace transmitting equipment with authorized equipment, as detailed under paragraph (f) of this section, provided that any changes made to authorized transmitting equipment is in compliance with the provisions of part 2 of the FCC rules concerning modifications to authorized equipment.

(d) Any manufacturer of a transmitter to be used in this service may authorize the equipment under the certification or verification procedure, as appropriate, following the procedures set forth in subpart J of part 2 of the FCC rules.

(e) An applicant for a TV broadcast auxiliary station may also authorize an individual transmitter, as specified