

# INFORMATION BULLETIN



# FEDERAL COMMUNICATIONS COMMISSION

## FM TRANSLATOR AND BOOSTER STATION SELF - INSPECTION CHECKLIST

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# FM TRANSLATOR & BOOSTER STATION SELF-INSPECTION CHECKLIST

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# INTRODUCTION

Welcome to the FM Translator and Booster Station Self-Inspection Checklist.

The Enforcement Bureau (EB) of the FCC is committed to improving licensee compliance with the regulations governing FM Translators and Booster stations. We do this through a combination of educational and enforcement efforts. The enforcement effort usually involves an on-scene station inspection conducted by FCC personnel. Most on-scene inspections are conducted without prior notification to the station licensee.

This checklist has been developed to assist licensees in conducting a self-inspection of their station. It provides an opportunity for the licensee to review and correct any deficiencies associated with the operation of a station without an actual on-scene visit by the Commission. While not all translator and booster station regulations are covered by this checklist, you will be able to assess your compliance with the most frequently violated regulations. Each question contains a reference to the relevant rule section(s) to facilitate your review. These references pertain to Title 47 Code of Federal Regulations (C.F.R.) Parts 11, 17, 73 and 74.

The following boxes are provided throughout the checklist to aid the licensee in determining the stations compliance:

**Y** = **YES**. The station is in compliance with this item.

**P** = The station is not in compliance with this item. Corrective action is **PENDING**.

**N/A** = **NOT APPLICABLE** to this station. If this response is not provided then this question is applicable to all translator and booster stations.

All of the above responses are not applicable to every question. Only appropriate responses will be provided for each question.

You will note that the above responses do not include a "NO" answer. Any question in which a "NO" answer is applicable would be a violative condition requiring corrective action. Stations encountering such situations should take immediate steps to correct the problem.

## WHERE TO GET ASSISTANCE, FORMS and OTHER INFORMATION

On June 3, 1996, the FCC established a national call center in Gettysburg, Pennsylvania. This call center is operated by the FCC Consumer and Governmental Affairs Bureau (CGB). This facility is capable of providing services for the hearing impaired and the center is staffed full-time with bi-lingual (English and Spanish) Specialists. The toll free telephone number for this call center is 1-888-CALLFCC (1-888-225-5322).

If you have any questions about this self inspection checklist or the applicability of any regulation to your operation, you may contact the FCC Call Center. **DO NOT MAIL THIS CHECKLIST TO THE FCC FOR OUR REVIEW!**

Requests for Emergency Alert System (EAS) related documents should be directed to the Commission's EAS Office at (202) 418-1228. Information on EAS may also be found through the FCC, Enforcement Bureau web page at <http://www.fcc.gov/eb/eas>.

Requests for any [FCC form](#) or bulletin can be directed to the Commission's forms distribution contractor at 1-800-418-FORM (1-800-418-3676). This is a voice mail answering system. You should have the number of the form available when you call.

Some forms, bulletins and other documents, including a copy of this checklist, are also available through the Internet by visiting the FCC Homepage at "<http://www.fcc.gov>". Please check this Homepage for the latest update to the checklist. Some forms may also be filed through the use of the Internet.

The FCC, Media Bureau, Audio Division maintains a webpage at "<http://www.fcc.gov/mb/audio>". This page provides information relating to radio broadcast, including a list of current telephone numbers available for inquiries. Current rules pertaining to AM and FM stations are maintained at "<http://www.fcc.gov/mb/audio/bickel/amfmrule.html>". The rules pertaining to FM Translators and Boosters can be found at "<http://www.fcc.gov/mb/audio/bickel/part74rule.html>". Some recent translator decisions and other translator/booster station items of interest can be found by visiting web pages at <http://www.fcc.gov/mb/audio/decdoc/engrser.html#TRANSL> and at <http://www.fcc.gov/mb/audio/trans&b.html>.

The FCC maintains a fax on demand service at (202)418-2830. Through this service you may obtain information on the following:

Daily Digest	News Releases	Speeches	
Fact Sheets	Current List of Events	Public Notices	Auctions

The government printing office (<http://www.gpo.gov>) maintains current copies of the Code of Federal Regulations (C.F.R.) in both printed and electronic form. A beta online version of Title 47 C.F.R. Parts 11, 17, 73 and 74 can be found at:

Part 11: [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_47/47cfr11\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_47/47cfr11_00.html)

Part 17: [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_47/47cfr17\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_47/47cfr17_00.html)

Part 73: [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_47/47cfr73\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_47/47cfr73_00.html)

Part 74: [http://www.access.gpo.gov/nara/cfr/cfrhtml\\_00/Title\\_47/47cfr74\\_00.html](http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_47/47cfr74_00.html)

## SECTION I: ADMINISTRATIVE AND NON-TECHNICAL

**A. AUTHORIZATIONS:** The station license, construction permit and/or any other instrument of authorization shall be kept in the station's record file. In addition, the call sign, together with the name, address, telephone number of the licensee or local representative of the licensee, the name and address of a person as well as the place where station records are maintained, shall be displayed at the translator or booster site so as to be visible to a person standing on the ground at the transmitter site. Such display shall be prepared so as to withstand normal weathering for a reasonable period of time and shall be maintained in legible condition. [See [74.1265\(a&b\)](#)]

1.  Y  P AUTHORIZATIONS: Are current station authorizations available in the station's record file? [See [74.1265\(a\)](#)]
  
2.  Y  P DISPLAYED INFORMATION: Are the names and addresses of the licensee and of the person maintaining station records displayed at the translator/booster site where they are clearly visible? [See [74.1265\(b\)](#)]

### B. STATION LOGS/RECORDS:

STATION LOGS include entries pertaining to equipment status, equipment calibration/maintenance and, when applicable, the recording of tower light outages. STATION RECORDS include, but are not limited to current station authorization(s), official correspondence with the FCC, contracts, permission for rebroadcasts, and other pertinent documents.

The station logs and records are to be kept at any accessible place in the community of license of the translator or booster station, or alternatively if the station is licensed to the same licensee of the primary station, then the files may be maintained where the primary station records are kept. The station records shall be made available upon request to any authorized representative of the Commission. Station logs and records are to be retained for a period of two years. [See [74.1281\(a-d\)](#) and [74.1284\(b\)](#)]

3.  Y  P LOGS/RECORDS: Are required station logs retained for a period of 2 years? [See [74.1281\(d\)](#)]
  
4.  Y  P AVAILABILITY: Are station logs/records readily available for inspection and/or duplication at the request of the FCC or its representatives? [See [74.1281\(c\)](#)]
  
5.  Y  P COMPLETENESS: Do the logs and records clearly and accurately document all repairs, changes and other maintenance performed on the station equipment during the past two years? [See [74.1281\(a\)](#)]
  
6.  Y  P  N/A REBROADCAST AUTHORITY: Does the station records include documentation showing prior consent permitting rebroadcast of the primary station's broadcast signal? [See [74.1281\(a\)](#) and [74.1284\(b\)](#)]

**NOTE:** The documentation permitting rebroadcast of the primary station's broadcast signal is only valid for the duration of ownership by the primary station licensee. Any change in ownership of the primary station would require new documentation permitting the rebroadcast of signals. In addition, stations should request a copy of the primary station license and subsequent renewals as part of the documentation authorizing the rebroadcast of signals.

**SECTION I: Continued**

**C. COPIES OF RULES:** Each licensee or permittee of a translator or booster station shall have a current copy of Title 47 C.F.R. Parts 0,1,2,17,73 and 74, and shall make the same available for use by the operator in charge. Such rules are printed annually by the Government Printing Office. See the GPO web site at <http://www.gpo.gov/>. [See [74.1269](#)]

7.   CURRENT COPY: Does the licensee/permittee have a current copy of the rules available? [See [74.1269](#)]

**D. STATION IDENTIFICATION:** A translator station shall be identified by one of two methods:  
(1) By arranging for the primary station to identify the translator station by call sign and location with three identifications made during each day. More ID's may be given, but one ID is required between 7a.m.-9a.m., one between 12:55p.m.-1:05p.m., and one between 4p.m.-6p.m. time periods, local time. Stations which do not begin their broadcast before 9 a.m. shall make their first ID at the beginning of their broadcast day. Licensees using this form of ID shall also arrange for the primary station licensee to keep in its file, and to make available to FCC personnel, the translator's call letters and location, giving the name, address and telephone number of the licensee or their service representative. The licensee is responsible for furnishing current information to the primary station licensee for this purpose. [See [74.1283\(a\) and \(c\)\(1\)](#)]

(2) By transmitting the call sign in International Morse Code at least once each hour. Transmitters of translator stations of more than 1 watt transmitter output power (TPO) **MUST** be equipped with an automatic keying device that will transmit the call sign at least once each hour, unless the licensee has a firm agreement for the primary station to broadcast the call sign. (Note: A firm agreement should be in writing with a copy available for inspection) [See [74.1283\(a\) and \(c\)\(2\)](#)]

Booster stations shall be identified by their primary stations by the broadcasting of the primary stations call signs and location. [See [73.1201](#) and [74.1283\(e\)](#)]

8.   IDENTIFICATION: Is the station identification made in accordance with [74.1283](#)?

**SECTION I: Continued**

**E. LOCAL PROGRAM ORIENTATION:** Booster stations do not have authority to originate programming, but may provide locally generated signals for test purposes only. Translator stations may originate programming for emergency warnings of imminent danger and to seek or acknowledge financial support deemed necessary to the continued operation of the translator. Originations concerning financial support are limited to a total of 30 seconds an hour. [See [74.1231\(g&h\)](#)]

9.   ORIENTATION: Is the station in compliance with section [74.1231](#) concerning origination of programming?

**F. CROSS-SERVICE BROADCASTS:** An FM translator is not authorized to rebroadcast the transmissions of any class of station other than an FM broadcast station or another FM translator. Only one input and one output frequency will be assigned to each FM translator. FM Booster stations are authorized to amplify and reradiate signals on the same FM channel as the primary station they are associated with. [See [74.1201\(f\)](#), [74.1202\(a&c\)](#), [74.1232\(c\)](#) and [74.1284\(c\)](#)]

10.   BROADCAST SERVICE: Is this station rebroadcasting an authorized FM station on an authorized FM channel? [See [74.1201](#), [74.1202](#), [74.1232](#) and [74.1284](#)]

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## SECTION II: ANTENNA STRUCTURES

- A. ANTENNA REGISTRATION:** Most antenna structures that are higher than 60.96 meters (200 feet) above ground level or that may interfere with the flight path of a nearby airport must be studied by the Federal Aviation Administration (FAA) and registered with the FCC. **Owners** are required to register their non-exempt tower structures with the FCC. All proposed and altered antenna structures must be registered prior to construction or alteration. For licensees this means that the tower must be registered before a new construction permit or license modification involving the tower or antenna is granted.

Licensees should be familiar with the painting and lighting specifications shown on their station authorization. In the event that the structure owner is unable to maintain the prescribed painting and lighting, e.g. in cases including but not limited to abandonment, negligence, or bankruptcy, the FCC would require that each tenant licensee on the structure undertake efforts to maintain painting and/or lighting. Additionally, if the licensee has reason to believe that the structure is not in compliance or that the owner is not carrying out its responsibility to maintain the structure, the licensee must immediately notify the owner, notify the site management company (if applicable), notify the FCC, and make a diligent effort to ensure that the antenna structure is brought into compliance.

Once a tower is registered, then the registration number is to be displayed in a conspicuous place that is readily visible near the base of the antenna structure. When the tower is located where the number cannot be seen without access to the property on which it is located, then the number should also be placed on the gate or fence leading to the tower where an outside observer can see it. Materials used to display the registration number must be weather-resistant and of sufficient size to be easily seen.

An informational FACT SHEET, PR5000-15, "ANTENNA STRUCTURE REGISTRATION", and the Antenna Structure Registration Form ([FCC Form 854](#)), may be obtained by contacting the FCC's Forms Distribution Center at (800)418-3676. This document will provide information on how to register a tower. Users may also visit the FCC's Internet Homepage at <http://wireless.fcc.gov/antenna/> for up to date information on filing procedures, electronic filing and database access.

11.  Y  P  N/A Registration: Has the owner of the tower on which the station antenna is mounted obtained registration for the structure? [See FACT SHEET - PR5000-15]
12.  Y  P  N/A Posting of Number: Has the registration number been posted in an easily viewed location at the tower site? [See FACT SHEET - PR5000-15]

**SECTION II: Continued**

**B. ANTENNA SPECIFICS:** The construction permit, station license, or other instrument of authorization provides authority for the station to operate under a specific set of operating parameters. The licensee must thoroughly review the current station authorization, and where applicable the structure registration, to compare the listed specifications to the location, height, etc. that is actually used by this station. [See the Terms of the Station Authorization (TSA)]

- 13.  Y  P OVERALL HEIGHT: Does the overall height of the structure match that specified in the station authorization and, where applicable, the structure registration? [See TSA]
- 14.  Y  P ANTENNA: Does the number and height of the antenna bays match that specified in the station authorization? [See TSA]
- 15.  Y  P LOCATION: Does the street address and geographical coordinates of the station transmitter/tower location match exactly with the information shown on the station authorization and, where applicable, the structure registration? [See TSA]

**C. TOWER LIGHT OBSERVATIONS:** The lighting on tower structures is to be observed at least once every 24 hours either visually or by observing an automatic indicating device; or alternatively the licensee/tower owner may provide and maintain an automatic alarm system to constantly monitor the lighting on a structure. All automatic or mechanical control devices, indicators, and alarm systems are required to be inspected at intervals NOT TO EXCEED 3 months. [See [17.47](#)]

- 16.  Y  P  N/A OBSERVATIONS: Is the lighting on the tower(s) observed at least once every 24 hours either visually or by observing an automatic indicating device; or alternatively has the licensee/tower owner provided and maintained an automatic alarm system? [See [17.47](#)]
- 17.  Y  P  N/A MAINTENANCE CHECKS: Have all automatic and/or mechanical control devices, indicators, and alarm systems associated with the antenna structure lighting been inspected within the last 3 months? [See [17.47](#)]

## SECTION II: Continued

- D. **PAINTING/LIGHTING:** The station authorization and/or tower registration specifies the painting and lighting requirements for your operation. This is shown as a set of numbers or letters which correspond to paragraphs found on FCC Form 715 (Numbers - For towers with beacons and side lights) or 715A (Letters - For towers with strobed lighting), or the most current [FAA Advisory Circular \(currently AC 70/7460-1K\) on Obstruction Marking and Lighting](#). If no painting or lighting is required, then the authorization will specify "NONE" or "NONE REQUIRED". Tower registration is only necessary when painting and/or lighting is required.

The licensee must make certain that the number and placement of paint bands and lighting match exactly with that specified in the tower registration. The tower owner/licensee should also be aware of the requirement to clean or repaint tower structures as often as necessary to maintain good visibility to aircraft.

[See [Part 17](#) and TSA]

**NOTE:** One of the most common problems associated with tower painting is the feedlines that are on the outside legs of a tower. In many cases, the tower is painted correctly, but the solid black colored feedlines defeat the purpose of the painting by covering the outside legs of the tower. The tower owner/licensee should make certain that the feedlines are also painted in such instances. This does not apply in cases where the tower is authorized for strobe lighting.

18.  Y  P  N/A PAINT SPECIFICATIONS: Does the painting on the tower structure(s) match the specifications in the station authorization? [See TSA]
19.  Y  P  N/A PAINT BANDS: Does the structure have the correct number of bands and are the top and bottom bands painted aviation orange? [See [Part 17](#)]
20.  Y  P  N/A LIGHTING SPECIFICATIONS: Does the lighting on the tower structure match exactly with the specifications in the station authorization? [See TSA]

- E. **FAA NOTIFICATIONS:** The tower owner/licensee is to notify the nearest Federal Aviation Administration (FAA) Flight Service Station within 30 minutes of the observation of an improper functioning or extinguished **top** steady burning light or **ANY** flashing obstruction light regardless of its position on the structure. Such improper functioning beacons include non-lighted beacons as well as those that are lighted, but non-flashing. Notification is to also be made immediately to the FAA once the beacon or steady burning top light is returned to service. Notification is **not** required when side light outages are observed. Tower owners/licensees should insure that the telephone number to the nearest FAA Flight Service Center is readily available and known to all personnel who would be responsible for notifying the FAA of such outages. [See [17.48](#)]

21.  Y  P  N/A FAA NOTIFICATION: Are the tower owner/licensee and all station operators aware of the requirement to notify the nearest FAA Flight Service Station within 30 minutes of the observation of an outage **AND** to notify the FAA again once the outage is corrected? [See [17.48](#)]

## SECTION II: Continued

- F. STATION LOGS:** For all stations operating from a tower owned by the licensee and which have authorizations that specify tower lighting, the tower owner/licensee is to make entries in the station log concerning ANY observed or otherwise known extinguishment or improper functioning of ANY tower light regardless of its position on the tower. [See [17.49](#), [73.1213](#) and [73.1820\(a\)\(1\)\(i\)](#)] This log must contain the following:
- 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, required for outages of any flashing light.
  - d. The date, time and nature of adjustments, repairs or replacements made. This would include any work conducted as part of a system inspection or preventive maintenance program.

22.  Y  P  N/A STATION LOGS: Does the tower owner/licensee maintain a station log containing entries concerning ANY observed or otherwise known extinguishment or improper functioning of ANY tower light? [See [17.49](#), [73.1213](#) and [73.1820\(a\)\(1\)\(i\)](#)]

**NOTE 1:** Tower Owners/licensees should also log the date and time of quarterly inspections of lighting systems as described in [§17.47\(b\)](#).

**NOTE 2:** Any extinguishment or improper functioning of a required tower light, regardless of its position on the tower, is to be corrected as soon as possible. See [§17.49\(b\)](#) and the terms of the structure registration. A structure is not in compliance with the structure registration if any required light is not functioning properly. However, violations are avoided by prompt and complete logging of the outage and by documenting that the efforts made to correct the condition are being done in a timely manner.

### SECTION III: TECHNICAL REQUIREMENTS

- A. **POWER:** The maximum authorized effective radiated power (ERP) permitted for any translator is 250 watts, while the maximum ERP for a booster is 20% of the primary station's maximum allowable ERP. In no event shall a translator or booster station be operated with a transmitter output power (TPO) in excess of 105% of that authorized. The power is to be maintained as near as practicable to the station's authorized power. [See [74.1235\(a&e\)](#), [74.1263\(c\)](#) and TSA]

In the event that it becomes technically impossible to operate, then a station may temporarily discontinue operation for a period of not more than 30 days without specific authority from the FCC. If operation is terminated for 10 consecutive days, then a notification must be sent to the FCC, Media Bureau, Audio Division, Washington, D.C. 20554 no later than the 10th day of the terminated operation. If normal power is restored prior to the expiration of the 30 day period, the licensee must notify the FCC upon restoration of normal operation.

23.  Y  P  N/A OPERATING POWER: Is the station's operating power at 105% or less of that authorized? [See TSA, [74.1235](#) and [74.1263](#)]

- B. **POWER DETERMINING METHOD:** Translator and booster stations may not operate with a TPO in excess of the transmitter certificated power rating. If the station is authorized a TPO that is less than its transmitter certificated power rating, then power may be determined by either the direct or indirect method. The direct method of power determination uses the indications of a calibrated transmission line meter located at the RF output terminals of the transmitter. This meter must be calibrated whenever there is any indication that the calibration is inaccurate or whenever any component of the metering circuit is repaired or replaced. [See [74.1235\(e\)](#)]

The indirect method is determined by applying the appropriate factor to the input power to the last radio-frequency power amplifier stage of the transmitter, using the following formula:

$$\text{Transmitter output power} = E_p \times I_p \times F$$

Where:  $E_p$  = DC input voltage of final radio stage.  
 $I_p$  = Total DC input current of final radio stage.  
 $F$  = Efficiency factor of the transmitter.

The value of the efficiency factor, F, is to be determined and a record of its value is to be maintained and available upon request. [See [73.267](#)]

Licensees must make certain that all duty operators know which method of power determination is being used and how to calculate the output power based on that method.

24.  Y  P  N/A EFFICIENCY FACTOR: Is the efficiency factor known for each transmitter used and a record kept as to its value, along with the source from which this value was determined? [See [73.267\(c\)](#)]

25.  Y  P POWER METHOD: Are responsible station personnel able to determine the output power of this station using one of the methods described above? [See [73.267](#) and [74.1235](#)]

**SECTION III: Continued**

- C. FREQUENCY:** Stations with an authorized TPO of 10 watts or less shall maintain the center frequency within .01 percent of its assigned frequency. For stations with a TPO greater than 10 watts, the departure of the carrier or center frequency may not exceed 2000 Hz from that authorized. [See [73.1545](#) and [74.1261\(a&b\)](#)]

26.  Y  P FREQUENCY: Is the station in compliance with the frequency tolerance specified in [73.1545](#) and/or [74.1261](#)?

**NOTE:** Stations are not required to provide a means for measuring the operating frequency of the transmitter as only equipment having the required stability will be approved for use. However, in the event that a station is found to be operating beyond the frequency tolerance specified, then the station shall promptly suspend operation and shall not resume until the station has been restored to its assigned frequency.

- D. LOSS OF SIGNAL:** For stations with authorized TPO of more than 1 watt, the transmitting system shall be equipped with automatic circuits to place the transmitter in a nonradiating condition when no input signal is being received. [See [74.1250\(c\)\(4\)](#) and [74.1263\(b\)](#)]

27.  Y  P  N/A SIGNAL LOSS: Is automatic circuitry installed that will place the station in a non-radiating conditions when no input signal is being received?  
[See [74.1250](#) and [74.1263](#)]

- E. TRANSMITTER METERING:** The transmitting system apparatus shall contain automatic circuits to maintain the power output in conformance with [§74.1235\(e\)](#). If provision is included for adjusting the power output, then the normal operating constants shall be specified for operation at both the rated TPO and the minimum TPO at which the apparatus is designed to operate. The apparatus shall be equipped with suitable meters or meter jacks so that the operating constants can be measured while the apparatus is in operation. [See [74.1250\(c\)\(3\)](#)]

28.  Y  P METERING: Does the equipment at this station allow transmitter control personnel the capability of turning off the transmitter at any time the station is in operation?  
[See [73.1350\(b\)\(2\)](#)]

29.  Y  P OPERATING PARAMETERS: Does the licensee maintain necessary metering to determine compliance with power at this station? [See [74.1250\(c\)](#)]

## **SECTION IV: UNATTENDED OPERATION**

**A. UNATTENDED:** Translator and Booster stations may be operated without a designated person in attendance if the following requirements are met:

1) If the transmitter site cannot be reached promptly at all hours and in all seasons, then means shall be provided so that the transmitting apparatus can be turned on and off at will from a "point" which is readily accessible at all hours and in all seasons.

2) The transmitter shall also be equipped with suitable automatic circuits which will place it in a nonradiating condition in the absence of a signal on the input channel.

3) The on-and-off control, if at a location other than the transmitter site and the transmitting apparatus, shall be adequately protected against tampering by unauthorized persons.

4) The FCC, Media Bureau, Audio Division, 445 12th Street SW, Washington, DC 20554, shall be supplied by letter with the name, address and telephone number of a person or persons who may be contacted to secure suspension of operation of the translator promptly should such action be deemed necessary by the Commission. Such information shall be kept current by the licensee.

[See [74.1234\(a\)\(1-4\)](#)]

**NOTE:** Notification to the Commission of a "point" other than the transmitter site shall be for a fixed location where responsible station personnel may be contacted during all hours of operation and in all seasons. The licensee must have the ability to terminate operation from this fixed point. Licensees may elect to have automated monitoring equipment installed which will contact designated station personnel via wireless telephones, pagers and other devices in an attempt to correct transmitter or tower lighting conditions prior to contacting personnel at a fixed location.

30.  Y  P  N/A UNATTENDED: Does the licensee maintain a person on duty at a fixed location during all periods that the station is on the air that includes on and off control over the transmitting apparatus? [See [73.1234\(a\)](#)]

31.  Y  P  N/A NOTIFICATION: Has the licensee notified the Media Bureau in writing of the location of all control points other than the transmitter location? [See [73.1234\(a\)](#)]

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## V. ABBREVIATIONS

<b>AM</b>	- <b><i>Amplitude Modulation</i></b>
<b>ANSI</b>	- <b><i>American National Standards Institute</i></b>
<b>ATS</b>	- <b><i>Automatic Transmission System</i></b>
<b>dB</b>	- <b><i>Decibel</i></b>
<b>EAS</b>	- <b><i>Emergency Alert System</i></b>
<b>EFM</b>	- <b><i>Educational FM Station</i></b>
<b>ERP</b>	- <b><i>Effective Radiated Power</i></b>
<b>F</b>	- <b><i>Transmitter Efficiency Factor</i></b>
<b>FAA</b>	- <b><i>Federal Aviation Administration</i></b>
<b>FCC</b>	- <b><i>Federal Communications Commission</i></b>
<b>FM</b>	- <b><i>Frequency Modulation</i></b>
<b>kHz</b>	- <b><i>Kilohertz</i></b>
<b>LMA</b>	- <b><i>Local Marketing Agreement</i></b>
<b>LPFM</b>	- <b><i>Low Power FM Station</i></b>
<b>MHz</b>	- <b><i>Megahertz</i></b>
<b>NRSC</b>	- <b><i>National Radio Systems Committee</i></b>
<b>RF</b>	- <b><i>Radio Frequency</i></b>
<b>RMT</b>	- <b><i>Required Monthly Test (EAS)</i></b>
<b>RPU</b>	- <b><i>Remote Pickup Unit</i></b>
<b>RWT</b>	- <b><i>Required Weekly Test (EAS)</i></b>
<b>SCA</b>	- <b><i>Subsidiary Communications Authorization</i></b>
<b>STA</b>	- <b><i>Special Temporary Authority</i></b>
<b>TPO</b>	- <b><i>Transmitter Power Output</i></b>
<b>TSA</b>	- <b><i>Terms of the Station Authorization</i></b>
<b>TV</b>	- <b><i>Television Broadcast</i></b>

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## **VI. GLOSSARY OF BROADCAST TERMS**

- Amplitude Modulation (AM)** - *A type of transmission used in the standard radio broadcast band at 535-1705 kilohertz.*
- Bandwidth** - *The amount of frequency spectrum a radio signal occupies.*
- Booster Station** - *Similar to translator stations, these stations provide supplementary service to areas in which direct reception of radio service is unsatisfactory due to distance or terrain. Booster stations operate on the same frequency, under same ownership and with 100% rebroadcast content of the main station they are associated with, but at 20% or less of the main station's power.*
- EAS Attention Signal** - *An audio signal using the two tone frequencies of 853 and 960 Hz which is transmitted by an EAS station to actuate muted receivers for interstation receipt of emergency cuing announcements and broadcasts.*
- EAS Operating Handbook** - *A booklet which states in summary form the actions to be taken by station personnel upon receipt of emergency action notification, termination, or test messages.*
- EAS Generator/Encoder** - *Equipment capable of generating the EAS attention signal for transmission.*
- EAS Monitor/Decoder** - *Equipment capable of receiving the EAS attention signal and emergency programming transmitted by other EAS stations.*
- EAS Tests** - *Tests conducted weekly/monthly by EAS stations to ensure that their EAS equipment is functioning properly.*
- Equipment Performance Measurements** - *Measurements performed to determine the overall performance characteristics of a broadcast transmission system from point of program origination to sampling of signal as radiated.*
- Experimental Period** - *The time between 12 midnight local time and local sunrise, used by AM broadcast stations for tests, maintenance and experimentation.*

**SECTION VII: Continued**

- Extension Metering** - *The meters used to provide indications of a sampled parameter of a broadcast station transmitting system. To be considered an extension meter and not a remote meter, it must be less than 100 feet from the transmitter and installed in the same building as the transmitter.*
- Field Strength** - *Electric field intensity, usually measured in millivolts per meter (mV/m) or in decibels above 1 microvolt per meter (dBu).*
- Frequency Modulation (FM)** - *A method of modulation where the amplitude remains constant and the frequency of the carrier wave is varied according to the modulating wave. The FM broadcast band covers 88-108 Megahertz.*
- Output Power** - *The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load. Often referred to as TPO.*
- Public Inspection File** - *A publicly accessible file to be maintained by broadcast stations which contains documents pertaining to the station's licensing, ownership, and operation.*
- Remote Control** - *Operation by a properly designated person on duty at a control position from which the transmitter is not visible but that position is equipped with suitable controls so that essential functions can be performed.*
- Spurious Emissions** - *An emission on a frequency or frequencies which are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, intermodulation products and frequency conversion products.*
- Station Authorization** - *Any construction permit, license, special temporary authority, or any other authorization issued by the FCC.*
- Translator Station** - *Stations that provide supplementary service to areas in which direct reception of radio service is unsatisfactory due to distance or terrain barriers. Translators simultaneously rebroadcast the signal of a primary FM station on a different frequency. May be owned by same or different licensee than that of primary station.*

**SECTION VII: Continued**

***Time Brokerage*** - ***Sale by a licensee of discrete blocks of time to a broker who then supplies the programming to fill that time and sells the commercial spot announcements to support it.***

***Unattended Operation*** - ***Operation of a station by automatic means without the attention of a qualified operator.***