# INFORMATION BULLETIN



# FEDERAL Communications Commission

## LOW POWER TV, TV TRANSLATOR AND TV BOOSTER STATION

**SELF - INSPECTION CHECKLIST** 

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# LOW POWER TV, TV TRANSLATOR & TV BOOSTER STATION SELF-INSPECTION CHECKLIST

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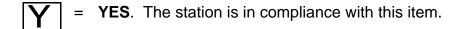
#### INTRODUCTION

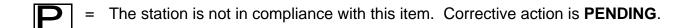
Welcome to the Low Power TV, TV Translator and TV Booster Station Self-Inspection Checklist.

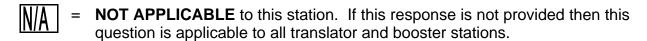
The Enforcement Bureau (EB) of the FCC is committed to improving licensee compliance with the regulations governing TV Translators and Booster stations. We do this through a combination of educational and enforcement efforts. The enforcement effort usually involves an on-scene station inspection conducted 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:







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!** 

Information and materials pertaining to the Emergency Alert System (EAS) may be found through the FCC. **Public** Safety and Homeland Security Bureau web page at http://www.fcc.gov/pshs/services/eas/index.html.

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. All application forms must be filed electronically through the CDBS e-filing system at: http://svartifoss2.fcc.gov/prod/cdbs/forms/prod/cdbs ef.htm

The FCC, Media Bureau, Video Division maintains a webpage at "http://www.fcc.gov/mb/video". This page provides information relating to television broadcast. Information on EEO requirements for broadcasters are maintained at http://www.fcc.gov/mb/policy/eeo or by calling EEO staff at (202)418-1450.

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://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=dfb774ab024c5b210621bfdd118f08f1&tpl=/ecfrbrowse/Title47/47cfr11\_main\_02.tpl Part 17: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=dfb774ab024c5b210621bfdd118f08f1&tpl=/ecfrbrowse/Title47/47cfr17\_main\_02.tpl

Part 73: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=dfb774ab024c5b210621bfdd118f08f1&tpl=/ecfrbrowse/Title47/47cfr73\_main\_02.tpl

Part 74: http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=dfb774ab024c5b210621bfdd118f08f1&tpl=/ecfrbrowse/Title47/47cfr74\_main\_02.tpl

#### 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 transmitter site so as to be visible to a person standing on the ground. 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 74.765(a&b)]

1. AUTHORIZATIONS: Are <u>current</u> station authorizations available in the station's record file? [See <u>74.765(a)</u>]

2. DISPLAYED INFORMATION: Are the names and addresses of the licensee and of the person maintaining station records displayed at the transmitter site where they are clearly visible? [See 74.765(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 74.781(a-d) and 74.784(b)]

3. Y P LOGS/RECORDS: Are required station logs retained for a period of 2 years? [See 74.781(d)]

4. AVAILABILITY: Are station logs/records readily available for inspection and/or duplication at the request of the FCC or its representatives? [See 74.781(c)]

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 74.781(a)]

6. REBROADCAST AUTHORITY: Does the station records include documentation showing prior consent permitting rebroadcast of the primary station's broadcast signal? [See 74.781(a) and 74.784(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 <a href="http://www.gpo.gov/">http://www.gpo.gov/</a>. [See 74.769]
  - 7. CURRENT COPY: Does the licensee/permittee have a current copy of the rules available? [See 74.769]
- **D. STATION IDENTIFICATION:** Each low power TV and TV translator station not originating local programming shall be identified by one of two methods:
  - (1) By arranging for the primary station, whose signal is being rebroadcast, to identify the translator station by transmitting an easily readable visual presentation or a clearly understandable aural presentation of the translator station's call letters and location. More ID's may be given, but two such ID's are required between 7 a.m. 9 a.m. and 3 p.m.- 5 p.m. times each day at approximately one hour intervals during each time period. Stations which do not begin their broadcast before 9 a.m. shall make these identifications in the hours closest to these time periods at the specified intervals. 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 74.783(a&b)]
  - (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 74.783(a)(1) and 74.750(c)(7)]

Low power TV stations with locally originated programming shall comply with the station identification procedures given in Section 73.1201. [See <u>73.1201</u> and <u>74.783(c)</u>]

Booster stations shall be identified by their primary stations by the broadcasting of the primary stations call signs and location. [See  $\frac{73.1201}{4.783(f)}$ ]

8. The IDENTIFICATION: Is the station identification made in accordance with <a href="74.783">74.783</a>?

#### SECTION I: Continued

- **E. LOCAL PROGRAM ORIGINATION:** 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 <a href="74.731(g&h)">74.731(g&h)</a>]
  - 9. ORIGINATION: Is the station in compliance with section <u>74.731</u> concerning origination of programming?
- **F. CROSS-SERVICE BROADCASTS:** An TV translator is not authorized to rebroadcast the transmissions of any class of station other than an TV broadcast station, another TV translator or LPTV station. Only one input and one output frequency will be assigned to each TV translator. TV Booster stations are authorized to amplify and reradiate signals on the same TV channel as the primary station they are associated with. [See 74.701(f), 74.702(a&c), 74.732(c) and 74.784(c)]
  - 10. PBROADCAST SERVICE: Is this station rebroadcasting an authorized TV station on an authorized TV channel? [See 74.701, 74.702, 74.732 and 74.784]

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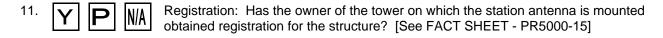
#### SECTION II: ANTENNA STRUCTURES

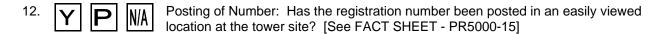
A. ANTENNA REGISTRATION: Most antenna structures that are higher than 60.96 meters (200 feet) above ground level or that may interfere with the flight path of a nearby airport must be studied by the Federal Aviation Administration (FAA) and registered with the FCC. <u>Owners</u> are required to register their non-exempt tower structures with the FCC, but tenants are responsible for compliance if an owner fails to register. 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 will 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, and notify the FCC if the antenna structure is not in compliance.

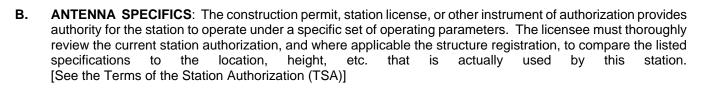
Once a tower is registered, then the registration number is to be displayed in a conspicuous place that is readily visible near the base of the antenna structure. When the tower is located where the number cannot be seen without access to the property on which it is located, then the number should also 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.

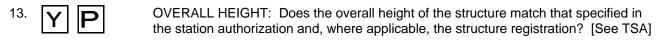
An informational FACT SHEET, PR5000-15, "ANTENNA STRUCTURE REGISTRATION", and the Antenna Structure Registration Form (FCC Form 854), may be obtained by contacting the FCC's Forms Distribution Center at (800)418-3676. This document will provide information on how to register a tower. Users may also visit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

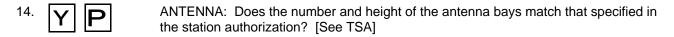


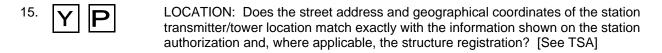


#### **SECTION II: Continued**









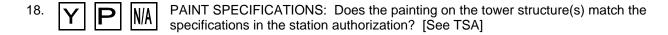
- C. TOWER LIGHT OBSERVATIONS: The lighting on tower structures is to be observed at least once every 24 hours either visually or by observing an automatic indicating device; or alternatively the licensee/tower owner may provide and maintain an automatic alarm system to constantly monitor the lighting 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]
  - 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. 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 necessary only 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.



- 19. 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 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 Federal Aviation Administration (FAA) at (Phone: 877-487-6867) 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 for the FAA is readily available and known to all personnel who would be responsible for notifying the FAA of such outages. [See 17.48]
  - 21. Y FAA NOTIFICATION: Are the tower owner/licensee and all station operators aware of the requirement to notify the FAA 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 <u>ANY</u> observed or otherwise known extinguishment or improper functioning of <u>ANY</u> tower light regardless of its position on the tower. [See <u>17.49</u>, <u>73.1213</u> and <u>73.1820(a)(1)(i)</u>] 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 STATION LOGS: Does the tower owner/licensee maintain a station log containing entries concerning <u>ANY</u> observed or otherwise known extinguishment or improper functioning of <u>ANY</u> tower light? [See <u>17.49</u>]

**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) for low power TV, TV translators or TV booster stations shall not exceed the following:

For Analog Stations: 3 kW for VHF Channels 2-13 and 150 kW for UHF Channels 14-69

For Digital Stations: 300 W for VHF Channels 2-13 and 15 kW for UHF Channels 14-69

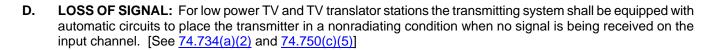
The actual power authorized may be less than these maximum values. All licensees are to maintain station power as near as practicable to the station's authorized power. [See 74.735(a&b), 74.763(c) and TSA]

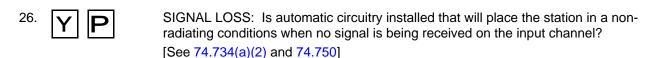
In the event that it becomes technically impossible to operate, then a station may temporarily discontinue operation for a period of not more than 30 days without specific authority from the FCC. If operation is terminated for 10 consecutive days, then a notification must be sent to the FCC, Media Bureau, Video Division, Washington, D.C. 20554 no later than the 10th day of the discontinued 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. If normal operation is not restored within 30 days, then the licensee should request Special Temporary Authority to remain silent.

OPERATING POWER: Is the station's operating power at, or below, that authorized? [See TSA, 74.735 and 74.763]

- **B. FREQUENCY:** The frequency tolerance is determined by the authorized power and type of station. For stations using direct frequency conversion of a received signal and not engaging in offset carrier operation, the frequency will be referenced to the authorized plus or minus 10 kHz offset, if any, of the primary station. For transmitters rated at not more than 100 watts peak visual power, the visual carrier shall be maintained to within 0.02 percent of the assigned visual carrier frequency. For transmitters rated at more than 100 watts peak visual power, the visual carrier shall be maintained to within 0.002 percent of the assigned visual carrier frequency. The aural carrier of stations employing modulating equipment shall be maintained at 4.5 MHz +/- 1 kHz above the visual carrier. For stations with a specific offset designation, the visual carrier shall be maintained to within 1 kHz of the assigned channel carrier frequency. [See 74.761(a-d)]
  - FREQUENCY: Is the station in compliance with the frequency tolerance specified in  $\frac{74.761}{?}$ ?
- C. FREQUENCY MEASUREMENTS: Licensees must measure the carrier frequencies of its output channel as often as necessary to ensure operation within the specified tolerances, and at least once each calendar year at intervals not exceeding 14 months. Documentation of these measurements must be maintained as part of the station records. In the event that the station is found to be operating beyond the frequency tolerance for that station, then the licensee promptly shall suspend operation of the transmitter and shall not resume operation until the transmitter has been restored to its assigned frequencies. [See 74.762(a-b) and 74.781(a)]
  - FREQUENCY MEASUREMENTS: Does the station have records documenting frequency measurements made during previous two years? [See 74.781(a,c,d)]

#### SECTION III: Continued





- **E. TRANSMITTER METERING/CONTROL:** Stations may be operated with or without a designated person in attendance at the transmitter. However, licensees are required to maintain control of the transmitting apparatus during all periods of operation. The transmitting system apparatus shall be equipped with suitable meters or meter jacks so that appropriate voltage and current measurements may be made while the apparatus is in operation. [See 74.18, 74.734(a)(1) and 74.750(c)(6)]
  - 27. CONTROL: 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 74.18 and 74.734]
  - 28. Y METERING: Does the licensee maintain necessary metering to determine compliance with power at this station? [See 74.750(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, Video 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 74.734(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.

