

Exhibit 7 – Statement A  
**NATURE OF THE PROPOSAL**  
**ENVIRONMENTAL CONSIDERATIONS**

prepared for  
**Jefferson-Pilot Communications Company of North Carolina**  
WLNK(FM) Charlotte, North Carolina  
Facility ID 30834  
Ch. 300C 100 kW 516 m

*Jefferson-Pilot Communications Company of North Carolina* (“*Jefferson-Pilot*”) is the licensee of FM station WLNK(FM), Ch. 300, Facility ID 30834, Charlotte, North Carolina (BLH-19850618LF). As the Commission is already aware, the authorized WLNK antenna and transmission line were damaged resulting in the reduced power operation of the station. Due to the extensive damage *Jefferson-Pilot* requested and received a Special Temporary Authorization (“STA”, BSTA-20050228ADP) to cover reduced power operation while repairs were being made. This STA will expire on September 9, 2005.

Because of the extensive damage to the authorized WLNK(FM) antenna, *Jefferson-Pilot*, in accordance with Section 73.1690(c) of the Commission’s Rules, has installed a replacement antenna<sup>1</sup>. Operation of the station at the full, authorized effective radiated power (“ERP”) of 100 kW has resumed. The replacement antenna, a Shively Model 6810-8R<sup>2</sup> is mounted such that its radiation center is identical to that of the authorized WLNK(FM) antenna. Accordingly, there is no corresponding change in the antenna height above average terrain (“HAAT”).

The number of antenna bays has been increased from 6 to 8 bays. Therefore, the following has been prepared to demonstrate compliance with the Commission’s radiofrequency radiation guidelines.

### **Human Exposure to Radiofrequency Electromagnetic Field**

The proposed operation was evaluated for human exposure to radiofrequency energy using the procedures outlined in the Commission’s OET Bulletin No. 65 (“OET 65”). OET 65 describes a

---

<sup>1</sup> Repairs were also performed on the WLNK(FM) transmission line. Over 300 feet of rigid transmission line were also replaced.

<sup>2</sup> The Shively 6810-8R antenna has no electrical or mechanical beam tilt. A separate antenna (Shively 6810-7R) is “interleaved” with the main antenna described herein. The Shively 6810-7R antenna is a new auxiliary antenna authorized in the construction permit BXPB-20050412ACR and may be employed for digital radio transmission. An *Application for License* covering the outstanding construction permit for the auxiliary antenna will be filed separately.

Exhibit 7 – Statement A

(Page 2 of 3)

means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET 65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

The replacement WLNK(FM) antenna is mounted such that its center of radiation is 544 meters above ground level. An ERP of 100 kilowatts, circularly polarized, is employed. According to elevation pattern data provided by the antenna manufacturer (**Exhibit 16 - Figure 1**), the WLNK(FM) antenna has a relative field of 24.7 percent or less from 10 to 90 degrees below the horizontal plane (i.e.: below the antenna). Thus, a value of 24.7 percent relative field is used for this calculation. The “uncontrolled/general population” limit for FM stations specified in §1.1310 is 200  $\mu\text{W}/\text{cm}^2$ .

The formula used for calculating FM signal density in this analysis is essentially the same as equation (9) in OET-65.

$$S = (33.4098) (F^2) (ERP) / D^2$$

Where:

<i>S</i>	=	power density in microwatts/cm <sup>2</sup>
<i>ERP</i>	=	total ERP in Watts (H + V)
<i>F</i>	=	relative field factor
<i>D</i>	=	distance in meters

Using this formula, the proposed facility would contribute a power density of 1.39  $\mu\text{W}/\text{cm}^2$  at two meters above ground level near antenna support structure, or 0.7 percent of the general population/uncontrolled limit. At ground level locations away from the base of the tower, the calculated RF power density is even lower, due to the increasing distance from the transmitting antenna.

§1.1307(b)(3) states that facilities contributing less than five percent of the exposure limit at locations with multiple transmitters (such as the case at hand) are categorically excluded from responsibility for taking any corrective action in the areas where their contribution is less than five

## Exhibit 7 – Statement A

(Page 3 of 3)

percent. Since the instant situation meets the five percent exclusion test at all ground level areas, the impact of the any other facilities using this site may be considered independently from this proposal.

Accordingly, it is believed that the impact of the proposed operation should not be considered to be a factor at or near ground level as defined under §1.1307(b).

### **Safety of Tower Workers and the General Public**

As demonstrated herein, excessive levels of RF energy will not be caused at publicly accessible areas at ground level near the antenna supporting structure. Consequently, members of the general public will not be exposed to RF levels in excess of the Commission's guidelines. Nevertheless, tower access will continue to be restricted and controlled through the use of a locked fence. Additionally, appropriate RF exposure warning signs will continue to be posted.

With respect to worker safety, it is believed that based on the preceding analysis, excessive exposure would not occur in areas at ground level. A site exposure policy will continue to be employed protecting maintenance workers from excessive exposure when work must be performed on the tower (or on nearby towers) in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines will be exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with all pertinent stations.

### **Conclusion**

Based on the preceding, it is believed that the instant proposal may be categorically excluded from environmental processing under Section 1.1306 of the Rules, hence preparation of an Environmental Assessment is not required.

Exhibit 7 - Table 1  
**ANTENNA / LINE SYSTEM GAINS AND LOSSES**  
 prepared July, 2005 for  
**Jefferson-Pilot Communications Company of North Carolina**  
 WLNK(FM) Charlotte, North Carolina  
 Facility ID 30834  
 Ch. 300C 100 kW 516 m

Existing License File Number: BLH-19850618LF

**Authorized Effective Radiated Power:            100 kW            20.00 dBk**

---

**Antenna System**

Shively 6810-8R            Max Power Gain:            4.531            6.56 dB

**Antenna Input Power:            22.1 kW**

---

**Line and Other Losses**

Line Segment 1

Shively 4" Rigid (50 Ohm)            Efficiency:            0.7188  
 Length 1862 ft            Loss:            1.43 dB

Line Segment 2

Shively 3" Rigid (50 Ohm)            Efficiency:            0.9978  
 Length 10 ft            Loss:            0.01 dB

**Total Losses:            1.44 dB**

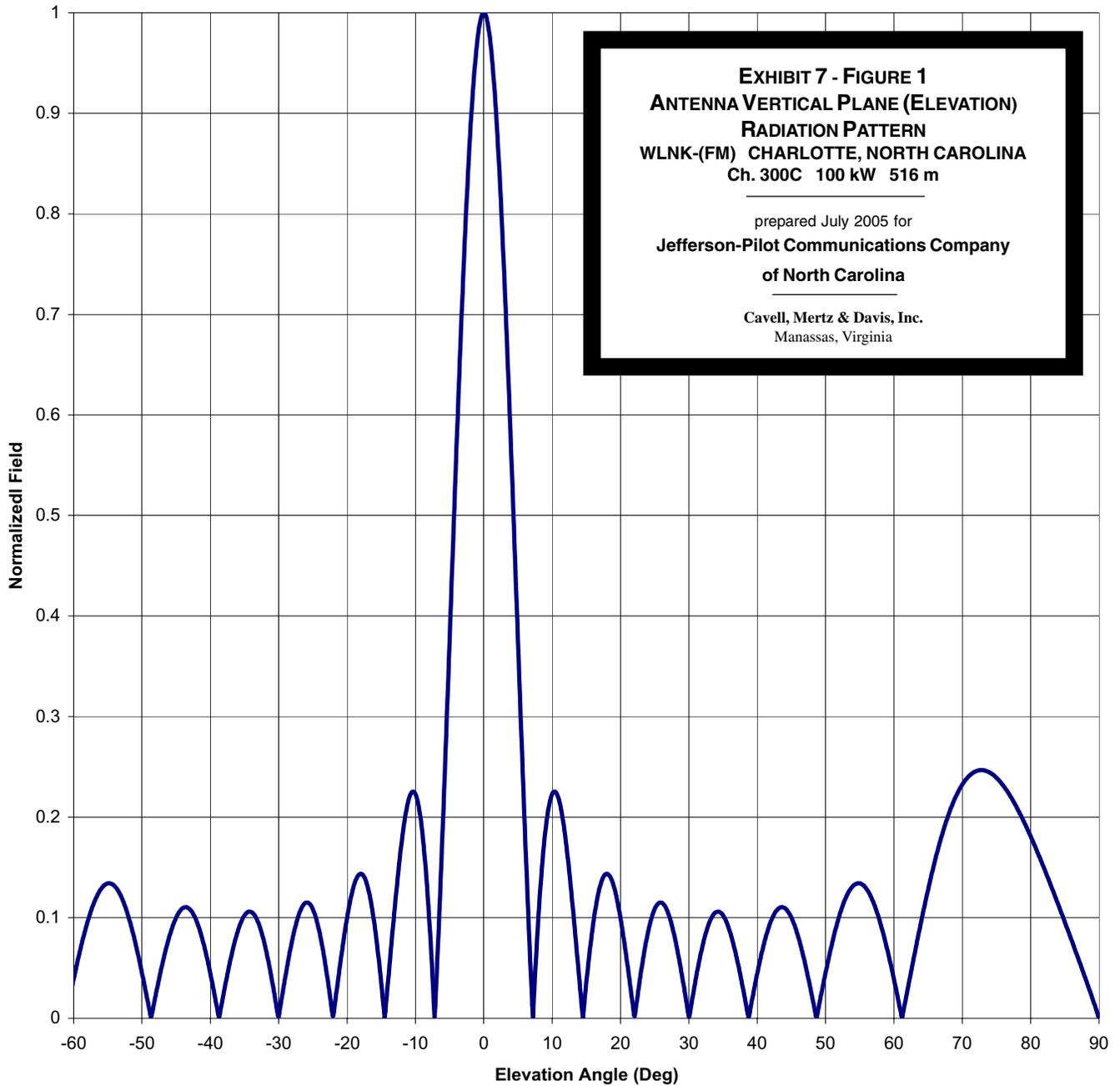
---

**Transmitter Power Output:            30.8 kW            14.88 dBk**

Antenna Mfg.: Shively Labs  
Antenna Type: 6810-8R Analog  
Station: WLNK  
Frequency: 107.9  
Channel #: 300  
Figure: 3 Analog

Date: 7/25/2005

Beam Tilt	0	
Gain (Max)	4.531	6.562 dB
Gain (Horizon)	4.531	6.562 dB



Engineering Exhibit

**APPLICATION FOR MODIFICATION OF  
FM STATION LICENSE**

prepared for

**Jefferson-Pilot Communications Company  
Of North Carolina**

WLNK(FM) Charlotte, North Carolina

Facility ID 30834

Ch. 300 100 kW 516 m

**Table of Contents**

FCC Form 302-FM, Section III

Exhibit 17

Statement A	Nature of the Proposal / Environmental Considerations
Table 1	Antenna / Line System Gains and Losses
Figure 1	Antenna Vertical Plane (Elevation) Radiation Pattern

*This material supplies a "hard copy" of the engineering portions of this application as entered July 26, 2005 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.*

**SECTION III - PREPARER'S CERTIFICATION**

I certify that I have prepared Section III (Engineering data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name RICHARD H. MERTZ		Relationship to Applicant (e.g., Consulting Engineer) CONSULTANT	
Signature		Date 07/26/2005	
Mailing Address CAVELL, MERTZ & DAVIS, INC. 7839 ASHTON AVENUE			
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20109 -	
Telephone Number (include area code) 7033929090	E-Mail Address (if available) RMERTZ@CMDCONSULTING.COM		

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

**Section III - Engineering**

**TECHNICAL SPECIFICATIONS**

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

**TECH BOX**

1.	Channel: 300		
2.	a. Effective Radiated Power:	100 kW(H) 100 kW(V)	
	b. Maximum Effective Radiated Power: (Beam-Tilt Antenna ONLY) <input checked="" type="checkbox"/> Not Applicable	kW(H) kW(V)	
3.	Transmitter Power Output: 30.8 kW		
4.	Antenna Data		
	Manufacturer SHI	Model 6810-8R	Number of Sections 8
			Spacing Between Sections (wavelength) 1

**NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.**

**CERTIFICATION**

**All applicants must complete this section.**

5.	<b>Main Studio Location.</b> The main studio location complies with 47 C.F.R. Section 73.1125.	<input checked="" type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 6]
6.	<b>Transmitter Power Output.</b> The operating transmitter power output produces the authorized effective radiated power.	<input checked="" type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 7]

**APPLICATIONS FILED TO COVER A CONSTRUCTION PERMIT.**

Only applicants filing this application to cover a construction permit must complete the following section.

**NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.**

7.	<b>Constructed Facility .</b> The facility was constructed as authorized in the underlying construction permit or complies with 47 C.F.R. Section 73.1690.	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in
----	--	--

		[Exhibit 8]
8.	<b>Special Operating Conditions.</b> The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit.	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 9]
	<b>An exhibit may be required.</b> Review the underlying construction permit.	[Exhibit 10]
<b>APPLICATIONS FILED PURSUANT TO 47 C.F.R. SECTIONS 73.1675(c) or 73.1690(c).</b> Only applicants filing this application pursuant to 47 C.F.R. Sections 73.1675(c) or 73.1690(c) must complete the following section.		
9.	<b>Changing transmitter power output.</b> Is this application being filed to authorize a change in transmitter power output caused by the replacement of omnidirectional antenna with another omnidirectional antenna or an alteration of the transmission line system? See 47 C.F.R. Sections 73.1690(c)(1) and (c)(10).	<input checked="" type="radio"/> Yes <input type="radio"/> No
10.	<b>Increasing effective radiated power.</b> Is this application being filed to authorize an increase in ERP for a station operating in the nonreserved band (Channels 221-300)? See 47 C.F.R. Sections 73.1690(c)(4), (c)(5) and (c)(7).  If "Yes" to the above, the applicant certifies the following:	<input type="radio"/> Yes <input checked="" type="radio"/> No
	a. <b>Spacing Requirements.</b> The increase in ERP was authorized pursuant to MM Docket 88-375 (Class A stations) OR the facility complies with the spacing requirements of 47 C.F.R. Section 73.207.	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 11]
	b. <b>International Coordination.</b> The transmitter site is greater than 320 km from the Canadian or Mexican borders OR coordination for the station's international class is complete.	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 12]
	c. <b>Interference.</b> The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied OR are not applicable.	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 13]
	<b>Exhibit required.</b> If the proposed facility must be notified to the entities set forth in 47 C.F.R. Section 73.1030, the applicant must provide a copy of the written approval for the ERP increase from the affected entity.	[Exhibit 14]
	d. <b>Multiple Ownership Showing.</b> The increase in ERP will not require the consideration of a multiple ownership showing pursuant to 47 C.F.R. Section 73.3555.	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 15]
	e. <b>Environmental Protection Act.</b> The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an <b>Exhibit is required.</b>	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 16]
	By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.	
11.	<b>Increasing vertically polarized effective radiated power.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(4) to authorize an increase in the vertically polarized ERP for a station operating in the reserved band (Channels 200-220)?  If "Yes" to the above, the applicant certifies the following:	<input type="radio"/> Yes <input checked="" type="radio"/> No
	a. <b>TV Channel 6 Protection Requirements.</b> The facility complies with the spacing requirements of 47 C.F.R. Section 73.525(a)(1).	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 17]
	b. <b>Environmental Protection Act.</b> The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an <b>Exhibit is required.</b>	<input type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 18]
	By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.	
12.	<b>Decreasing effective radiated power (non-reserved channel).</b> Is this application being filed pursuant to 47 C.F.R.	<input type="radio"/> Yes <input checked="" type="radio"/> No

<p>Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the nonreserved band (Channels 221-300)?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	
<p>a. <b>Community Coverage.</b> The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.315 where the distance to the 3.16 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 19]</p>
<p>b. <b>Auxiliary Facilities.</b> The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 20]</p>
<p>c. <b>Multiple Ownership Showing.</b> The decrease in ERP is not requested or required to establish compliance with 47 C.F.R. Section 73.3555.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 21]</p>
<p>13. <b>Decreasing effective radiated power (reserved channel).</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the reserved band (Channels 200-220)?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>a. <b>Community Coverage.</b> The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.1690(c)(8)(i) where the distance to the 1 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 22]</p>
<p>b. <b>Auxiliary Facilities.</b> The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 23]</p>
<p>14. <b>Replacing a directional antenna.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(2) to replace a directional antenna with another directional antenna?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>a. <b>Measurement of Directional Antenna.</b> The composite measured pattern and measurement procedures comply with 47 C.F.R. Section 73.1690(c)(2). <b>Exhibit required.</b></p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 24]</p> <p>[Exhibit 25]</p>
<p>b. <b>Installation of Directional Antenna.</b> The installation of the directional antenna complies with 47 C.F.R. Section 73.1690(c)(2). <b>Exhibit required.</b></p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 26]</p> <p>[Exhibit 27]</p>
<p>15. <b>Deleting contour protection status.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(6) to delete contour protection status (47 C.F.R. Section 73.215) for a station operating in the nonreserved band (Channels 221-300)?</p> <p>If "Yes" to the above, the applicant certifies that the facility complies with the spacing requirements of 47 C.F.R. Section 73.207.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 28]</p>
<p>16. <b>Use a formerly licensed main facility as an auxiliary facility.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1675(c)(1) to request authorization to use a formerly licensed main facility as an auxiliary facility and/or change the ERP of the proposed auxiliary facility?</p> <p>If "Yes" to the above, the applicant certifies the following:</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>a. <b>Auxiliary antenna service area.</b> The proposed auxiliary facility complies with 47 C.F.R. Section 73.1675(a).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 29]</p>
<p>b. <b>Environmental Protection Act.</b> The proposed facility is excluded from environmental processing under 47 C.F.R.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>

<p><b>D. Environmental Protection Act.</b> The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an <b>Exhibit is required.</b></p>	<p style="text-align: center;">- Yes - No</p> <p>See Explanation in [Exhibit 30]</p>
<p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	
<p>17. <b>Change the license status.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(9) to change the license status from commercial to noncommercial or from noncommercial to commercial?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>If "Yes" to the above, submit an exhibit providing full particulars. For applications changing license status from commercial to noncommercial, include Section II of FCC Form 340 as an exhibit to this application.</p>	<p>[Exhibit 31]</p>
<p><b>PREPARERS CERIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.</b></p>	

**Exhibits**

**Exhibit 7**

**Description:** WLNK(FM) APPLICATION FOR MODIFICATION OF LICENSE EXHIBIT 7

STATEMENT A - NATURE OF THE PROPOSAL, ENVIRONMENTAL CONSIDERATIONS PROVIDED AS A PDF FILE

**Attachment 7**

Description
<p><a href="#">Statement A - Nature of the proposal, Environmental Considerations</a></p>