

# Federal Communications Commission

**FCC MB - CDBS Electronic Filing**

**Account number: 815308**

**Description: MODIFICATION OF WNPFT-20180418ABT - GREENSBORO, NC**

**Application Reference Number: 20180723ABE**

**Successfully filed at Jul 23 2018 4:39PM**

**Based on the information supplied, no fee is required.**

[Menu](#)

[Logout](#)



If an amendment, **submit as an Exhibit** a listing by Section and Question Number the portions of the pending application that are being revised. [Exhibit 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. See General Instruction J.**

**Section II - Legal**

<p>1. <b>Certification.</b> Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>									
<p>2. Applicant is:</p> <table border="1" style="width:100%"> <tr> <td><input type="radio"/> an individual</td> <td><input type="radio"/> a general partnership</td> <td><input checked="" type="radio"/> a for-profit corporation</td> </tr> <tr> <td><input type="radio"/> a limited partnership</td> <td><input type="radio"/> a not-for-profit corporation</td> <td><input type="radio"/> a limited liability company (LLC/LC)</td> </tr> <tr> <td colspan="3"><input type="radio"/> other</td> </tr> </table> <p>a. If "other", describe nature of applicant in an Exhibit. [Exhibit 2]</p>		<input type="radio"/> an individual	<input type="radio"/> a general partnership	<input checked="" type="radio"/> a for-profit corporation	<input type="radio"/> a limited partnership	<input type="radio"/> a not-for-profit corporation	<input type="radio"/> a limited liability company (LLC/LC)	<input type="radio"/> other		
<input type="radio"/> an individual	<input type="radio"/> a general partnership	<input checked="" type="radio"/> a for-profit corporation								
<input type="radio"/> a limited partnership	<input type="radio"/> a not-for-profit corporation	<input type="radio"/> a limited liability company (LLC/LC)								
<input type="radio"/> other										
<p>3. a. Applicant certifies that it is not the licensee or permittee of the commercial primary station being rebroadcast and that neither it nor any parties to the application have any interest in or connection with the commercial primary station being rebroadcast. See 47 C.F.R. Section 74.1232(d).</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A See Explanation in [Exhibit 3]</p>									
<p>b. Applicant certifies that the FM translator's (a) 1mV/m coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 1mV/m coverage contour is contained within the greater of either: (i) the 2 mV/m daytime contour of the commercial AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the commercial AM primary station's transmitter site.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A See Explanation in [Exhibit 4]</p>									
<p><b>NOTE: If No to a. and b., and no waiver has been requested in an Exhibit, this application is unacceptable for filing. See 47 C.F.R. Section 74.1232(d).</b></p> <p>If Yes to (a) and No to (b) applicant is prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232(e).</p>										
<p>4. The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensee/permittee of the primary station or any person with an interest in or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e).</p>	<p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A See Explanation in [Exhibit 5]</p>									
<p>5. For applicants proposing translator rebroadcasts that are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. <b>If No, this application is unacceptable for filing.</b></p>	<p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A</p>									

6.	<p><b>Character Issues.</b> Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with:</p> <p>a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or</p> <p>b. any pending broadcast application in which character issues have been raised.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 6]</p>
7.	<p><b>Adverse Findings.</b> Applicant certifies that, with respect to the applicant, any party to the application, and any non-party equity owner in the applicant, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.</p> <p>If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and a description of the disposition of the matter. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 C.F.R. Section 1.65, the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and date of filing; and (ii) the disposition of the previously reported matter.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 7]</p>
8.	<p><b>Alien Ownership and Control.</b> Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 8]</p>
9.	<p><b>Program Service Certification.</b> Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
10.	<p><b>Local Public Notice.</b> Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
11.	<p><b>Auction Authorization.</b> If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable.</p> <p>An exhibit is required unless this question is inapplicable.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p> <p>See Explanation in [Exhibit 9]</p>
12.	<p><b>Anti-Drug Abuse Act Certification.</b> Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
13.	<p><b>Equal Employment Opportunity (EEO).</b> If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p>

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing FRED R. KEITH	Typed or Printed Title of Person Signing PRESIDENT
--	---

Signature	Date 7/23/2018
-----------	-------------------

### 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 CLIFTON G. MOOR	Relationship to Applicant (e.g., Consulting Engineer) TECHNICAL CONSULTANT	
Signature	Date 7/23/2018	
Mailing Address BROMO COMMUNICATIONS, INC. 3600 DALLAS HWY - SUITE 230 - PMB 164		
City MARIETTA	State or Country (if foreign address) GA	Zip Code 30064 -
Telephone Number (include area code) 4046362257	E-Mail Address (if available) GIL@BROMOCOM.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).

<b>Section III-A - Engineering</b>			
<b>TECHNICAL SPECIFICATIONS</b>			
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.			
<b>TECH BOX</b>			
1.	Channel: 291		
2.	Primary Station:		
	Facility ID Number	Call Sign	City
	20558	WZOO	ASHEBORO
			State
			NC
3.	Delivery Method (Select One):		
	<input type="radio"/> Off-air <input type="radio"/> Microwave <input type="radio"/> Satellite <input type="radio"/> Via <input checked="" type="radio"/> Other		
4.	Antenna Location Coordinates: (NAD 27)		
	Latitude:		
	Degrees 36 Minutes 5 Seconds 8.5 <input checked="" type="radio"/> North <input type="radio"/> South		
	Longitude:		
	Degrees 79 Minutes 45 Seconds 38.8 <input checked="" type="radio"/> West <input type="radio"/> East		
5.	Antenna Structure Registration Number: 1006347		
	<input type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA		
6.	Antenna Location Site Elevation Above Mean Sea Level:	234 meters	
7.	Overall Tower Height Above Ground Level:	169 meters	

8. Height of Radiation Center Above Ground Level:	165 meters(H) meters(V)																																																																																																
9. Effective Radiated Power:	0.25 kW(H) kW(V)																																																																																																
10. Transmitting Antenna: Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under <a href="http://licensing.fcc.gov/prod/cdb/bs/pubacc/prod/cdb/bs_pa.htm">CDBS Public Access</a> (http://licensing.fcc.gov/prod/cdb/bs/pubacc/prod/cdb/bs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search. <input type="radio"/> Nondirectional <input type="radio"/> Directional Off-the Shelf <input checked="" type="radio"/> Directional composite Manufacturer KAT Model TWO STACKED CL-FM @ 160 DEGREES Rotation:degrees <input checked="" type="checkbox"/> No Rotation																																																																																																	
<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th></tr> </thead> <tbody> <tr> <td>0</td><td>0.04</td><td>10</td><td>0.038</td><td>20</td><td>0.034</td><td>30</td><td>0.025</td><td>40</td><td>0.015</td><td>50</td><td>0.01</td></tr> <tr> <td>60</td><td>0.01</td><td>70</td><td>0.01</td><td>80</td><td>0.01</td><td>90</td><td>0.02</td><td>100</td><td>0.085</td><td>110</td><td>0.25</td></tr> <tr> <td>120</td><td>0.47</td><td>130</td><td>0.645</td><td>140</td><td>0.82</td><td>150</td><td>0.95</td><td>160</td><td>1</td><td>170</td><td>0.95</td></tr> <tr> <td>180</td><td>0.82</td><td>190</td><td>0.645</td><td>200</td><td>0.47</td><td>210</td><td>0.25</td><td>220</td><td>0.085</td><td>230</td><td>0.02</td></tr> <tr> <td>240</td><td>0.01</td><td>250</td><td>0.01</td><td>260</td><td>0.01</td><td>270</td><td>0.01</td><td>280</td><td>0.015</td><td>290</td><td>0.025</td></tr> <tr> <td>300</td><td>0.034</td><td>310</td><td>0.038</td><td>320</td><td>0.04</td><td>330</td><td>0.04</td><td>340</td><td>0.04</td><td>350</td><td>0.04</td></tr> <tr> <td colspan="2">Additional Azimuths</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0	0.04	10	0.038	20	0.034	30	0.025	40	0.015	50	0.01	60	0.01	70	0.01	80	0.01	90	0.02	100	0.085	110	0.25	120	0.47	130	0.645	140	0.82	150	0.95	160	1	170	0.95	180	0.82	190	0.645	200	0.47	210	0.25	220	0.085	230	0.02	240	0.01	250	0.01	260	0.01	270	0.01	280	0.015	290	0.025	300	0.034	310	0.038	320	0.04	330	0.04	340	0.04	350	0.04	Additional Azimuths											
Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value																																																																																						
0	0.04	10	0.038	20	0.034	30	0.025	40	0.015	50	0.01																																																																																						
60	0.01	70	0.01	80	0.01	90	0.02	100	0.085	110	0.25																																																																																						
120	0.47	130	0.645	140	0.82	150	0.95	160	1	170	0.95																																																																																						
180	0.82	190	0.645	200	0.47	210	0.25	220	0.085	230	0.02																																																																																						
240	0.01	250	0.01	260	0.01	270	0.01	280	0.015	290	0.025																																																																																						
300	0.034	310	0.038	320	0.04	330	0.04	340	0.04	350	0.04																																																																																						
Additional Azimuths																																																																																																	

Relative Field Polar Plot

11. For FM Boosters and Fill-in translators only. a. <b>FM Fill-in translators.</b> Applicant certifies that the FM translator's (a) 1mV/m coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 1mV/m coverage contour is contained within the greater of either: (i) the 2 mV/m daytime contour of the commercial AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the commercial AM primary station's transmitter site. b. <b>FM Boosters.</b> Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A See Explanation in [Exhibit 10] <input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A See Explanation in [Exhibit 11]
12. <b>Interference.</b> The proposed facility complies with all of the following applicable rule sections. Check all that apply:  <b>Overlap Requirements.</b> <input checked="" type="checkbox"/> a) 47 C.F.R. Section 74.1204 Exhibit Required. <b>Television Channel 6 Protection.</b> <input type="checkbox"/> b) 47 C.F.R. Section 74.1205 with respect to station(s) Exhibit Required.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 12] [Exhibit 13] [Exhibit 14]
13. <b>Unattended operation.</b> Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 15]
14. <b>Multiple Translators.</b> Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 16]

**Section IV -- Noncommercial Educational Point System Factors - -New and Major Change Applications on Reserved Channels Only** ( used to select among mutually exclusive applications for new stations and major modifications) **NOTE:** Applicants will not received any additional points for amendments made after the close of the application filing window.

<b>Preliminary Matter:</b> Does this application provide fill-in service only?		<input type="radio"/> Yes <input type="radio"/> No
1.	<b>Established Local Applicant:</b> Applicant certifies that for at least the 24 months immediately prior to application, and continuing through the present, it qualifies as a local applicant pursuant to 47 C.F.R. Section 73.7000, that its governing documents require that such localism be maintained, and that it has placed documentation of its qualifications as an established local applicant in a local public inspection file and has submitted to the Commission copies of the documentation.	<input type="radio"/> Yes <input type="radio"/> No
2.	<b>Diversity of Ownership:</b> Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) in which any party to the application has an attributable interest as defined in 47 C.F.R. Section 73.3555, that its governing documents require that such diversity qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	<input type="radio"/> Yes <input type="radio"/> No
3.	<b>State-wide Network:</b> Applicant certifies that (a) it has NOT claimed a credit for diversity of ownership above; (b) it is one of the three specific types of organizations described in 47 C.F.R. Section 73.7003(b)(3); and (c) it has placed documentation of its qualifications in a local public inspection file and has submitted to the Commission copies of the documentation.	<input type="radio"/> Yes <input type="radio"/> No
4.	<b>Technical Parameters:</b> Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) and that it has documented the basis for its calculations in the local public inspection file and has submitted copies to the Commission. Major modification applicants should include the area of proposed increase only (exclude the station's existing service area). (Points, if any, will be determined by FCC)	<input type="radio"/> Yes <input type="radio"/> No
	New (increased) area served in square kilometers (excluding areas of water):	
	Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
<b>Tie Breakers</b>		
5.	<b>Existing Authorizations.</b> a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations.  (number of attributable commercial and non-commercial licenses and construction permits)  b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6.	<b>Pending Applications.</b> a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations.  (number of attributable commercial and non-commercial applications)  b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

**Section VI -- Certification**

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing FRED R. KEITH	Typed or Printed Title of Person Signing PRESIDENT
Signature	Date 7/23/2018

**Exhibits**

**Exhibit 1**

**Description:** MINOR CHANGE

THIS APPLICATION IS A MINOR CHANGE. SEE THE ATTACHED EXHIBIT.

**Attachment 1**

Description
<u>Minor Change Demonstration</u>

**Exhibit 3**

**Description:** EXHIBIT 3

APPLICANT IS THE LICENSEE OF THE AM PRIMARY.

**Attachment 3**

**Exhibit 4**

**Description:** EXHIBIT 4

PLEASE SEE ENGINEERING SECTION.

**Attachment 4**

**Exhibit 10**

**Description:** FILL-IN TRANSLATOR DEMONSTRATION

SEE ATTACHED EXHIBIT.

**Attachment 10**

Description
<u>Fill-In Translator Demonstration</u>

**Exhibit 12**

**Description:** ALLOCATION STUDY



SEE THE ATTACHED STUDY.

**Attachment 12**

Description
<u>Allocation Study</u>

**Exhibit 13**

**Description:** CLEARANCE TO WVBZ

SEE ATTACHED EXHIBITS.

**Attachment 13**

Description
<u>Clearance to WVBZ - Narrative</u>
<u>Kathrein-Scala Two Stacked CL-FM Vertical Pattern</u>
<u>Graph of the 104.2 dBu signal</u>

**Exhibit 17**

**Description:** RADIOFREQUENCY RADIATION CALCULATION

THIS RADIOFREQUENCY RADIATION STUDY IS BEING CONDUCTED TO DETERMINE WHETHER THIS PROPOSAL IS IN COMPLIANCE WITH OET BULLETIN 65 DATED AUGUST 1997 REGARDING HUMAN EXPOSURE TO RADIOFREQUENCY RADIATION IN THE VICINITY OF BROADCAST TOWERS.

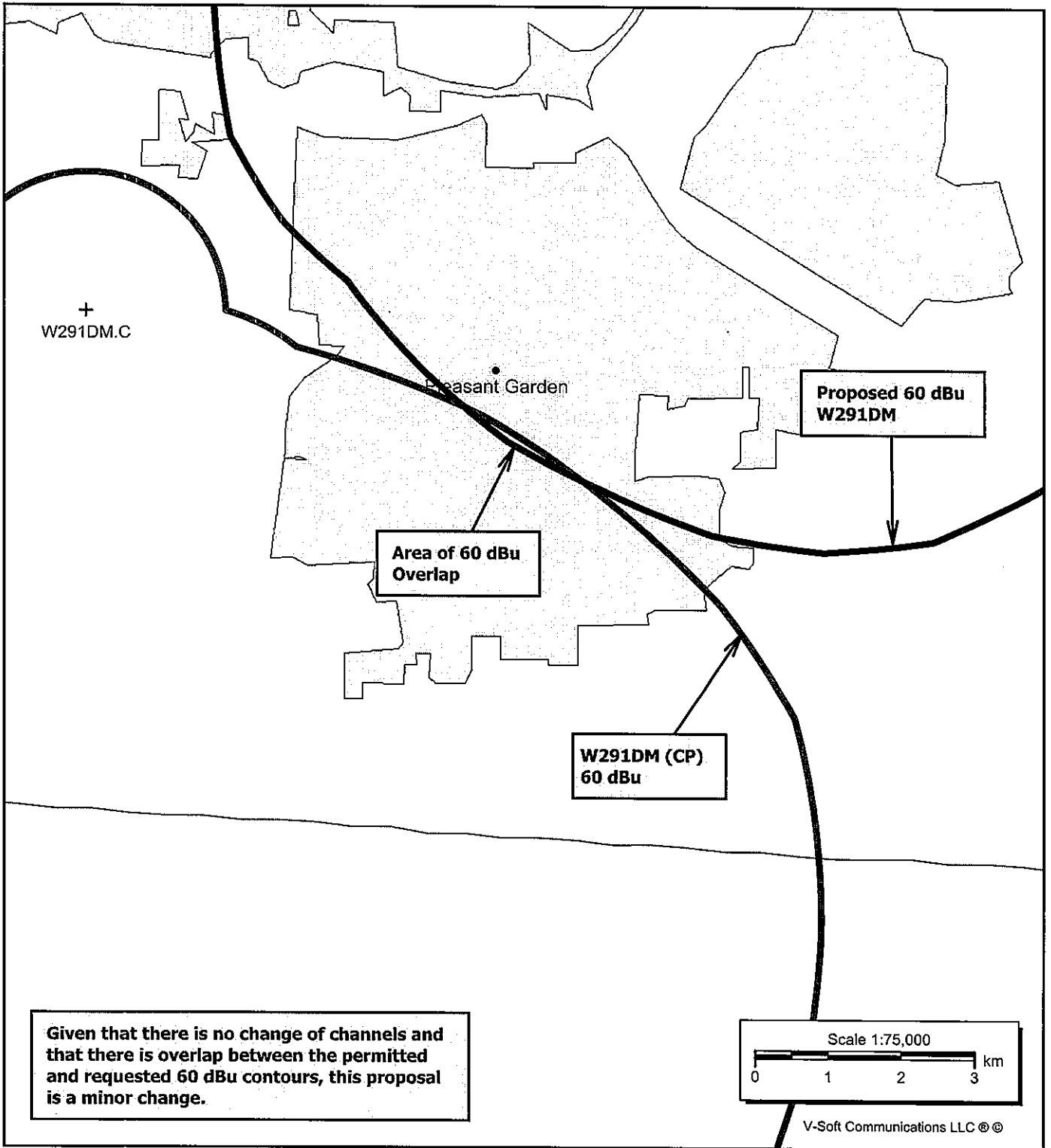
THE PROPOSED TRANSMITTER WILL OPERATE ON 106.1 MHZ WITH A HORIZONTAL POWER OF 0.25 KW FROM 165 M AGL. THE PROPOSED ANTENNA ARRAY IS TWO STACKED KATHREIN-SCALA CL-FMS WHICH QUALIFY FOR WORST CASE RFR TREATMENT. THIS PROPOSAL DELIVERS 0.30679 MICRO WATTS PER CENTIMETER SQUARED OR 0.1533% OF THE ANSI LIMIT AT THE TOWER BASE.

THERE ARE NO OTHER CO-LOCATED AM,FM OR TV TRANSMITTERS TO CONSIDER.

THIS SITE IS ALSO KNOWN AS ANTENNA STRUCTURE REGISTRATION NUMBER 1006347. NO CHANGE OF HEIGHT IS PROPOSED FOR THIS EXISTING STRUCTURE.

GIVEN THE FACT THAT THIS PROPOSAL DELIVERS AN EXTREMELY LOW RFR IMPACT, IT IS THOUGHT IT IS IN LINE WITH THE BULLETIN REFERENCED ABOVE.

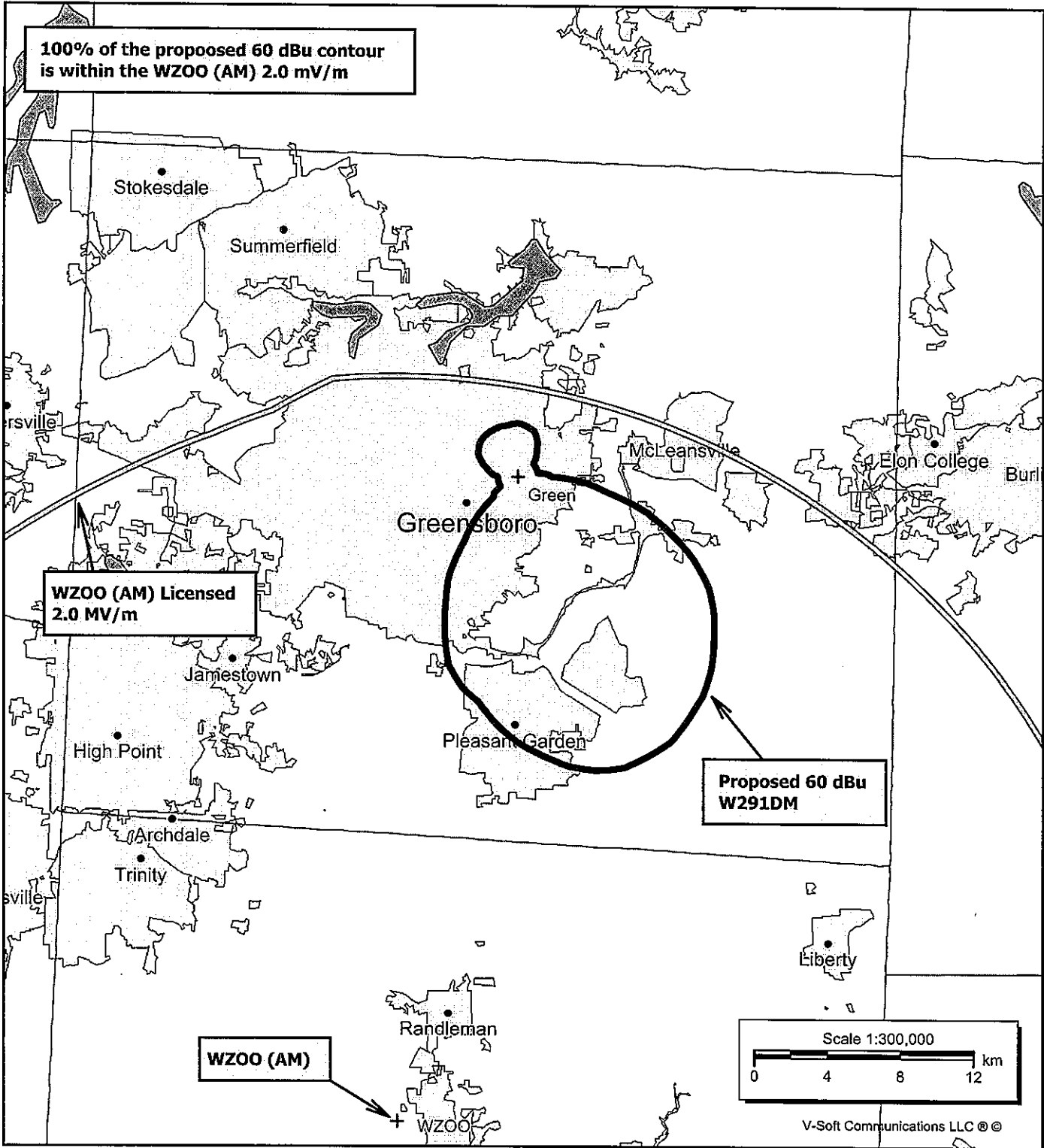
**Attachment 17**



**Minor Change Demonstration**  
**W291DM - 250 Watts (DA) - 399 M AMSL**  
**Greensboro, NC**

**Bromo Communications, Inc.**

July 2018



**Fill-In Translator Demonstration  
W291DM - 250 Watts (DA) - 399 M AMSL  
Greensboro, NC**

**Bromo Communications, Inc.**

July 2018

**Searching at ASR 1006347  
RCR Of Randolph County, Ltd.**

REFERENCE CH# 291D - 106.1 MHz, Pwr= 0.25 kW DA, HAAT= 160.5 M, COR= 399 M DISPLAY DATES  
36 05 08.5 N. Average Protected F(50-50)= 16.6 km DATA 07-21-18  
79 45 38.8 W. Standard Directional SEARCH 07-21-18

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
291C1 Knightdale	WTKK	LIC	C NC	112.0 292.7	120.32 BLH20090601APS	35 40 28.0 78 31 40.0	27.500 489	161.4 567	70.5 Capstar Tx, Llc, As Debtor	-54.8*	7.1
291D Greensboro	W291DM!	CP	DV NC	204.1 24.1	14.13 BNPFT20180418ABT	35 58 10.2 79 49 30.4	0.099	543	---Reference--- Rcr Of Randolph County, Lt		
291L1 Mount Zion	WEJM-LP	LIC	C NC	89.4 269.4	4.59 BLL20060215AAL	36 05 10.0 79 42 35.0	0.100 21	255	M&m Community Development,	-20.7*	-8.7*
289C1 Clemmons	WVBZ	LIC	NCX NC	300.9 120.5	63.51 BLH20110902AAJ	36 22 36.4 80 22 08.6	30.000 472	8.7 794	74.2 Clear Chan. B/casting Lice	52.1	-10.7*
291D Lexington	W291DD	CP	DC NC	285.8 105.6	37.00 BMPFT20170707AAV	36 10 31.7 80 09 24.0	0.250	43.1 417	10.2 Clearcast, Inc.	-5.6*	15.3
291D Lexington	W291DD	APP	DC NC	270.8 90.5	44.21 BMPFT20180703AAN	36 05 24.6 80 15 05.9	0.250	40.6 360	10.7 Clearcast, Inc.	0.3	27.0
292D Burlington	W292FF	CP	DV NC	73.1 253.3	22.29 BNPFT20171201AMX	36 08 36.5 79 31 25.0	0.220	11.6 335	6.3 Truth Broadcasting Corpora	4.8	9.7
290D Burlington	W290CX	LIC	C NC	83.6 263.8	28.12 BLFT20160727ADJ	36 06 48.0 79 27 01.0	0.250	14.4 260	8.8 Gray Broadcasting, Llc	5.4	11.9
238C1 High Point	WHPE-FM	LIC	CX NC	232.7 52.6	30.44 BMLED20140602AZZ	35 55 11.0 80 01 47.0	100.000 159	40.6 399	10.7 Bible Broadcasting Network	21.5R	8.9M
294C2 Semora	WKVK	LIC	CX NC	53.6 234.0	62.71 BMLED20150130ADO	36 25 07.0 79 11 49.0	50.000 150	5.9 315	51.6 Educational Media Foundati	52.3	10.9
290D Siler City	W290DO	CP	C NC	148.3 328.4	46.02 BNPFT20180418AHH	35 43 59.0 79 29 32.0	0.250	10.1 237	7.1 Chatham Broadcasting Co.,	18.9	13.8
293C1 Salisbury	WEND	LIC	CN NC	235.2 54.7	95.65 BLH19990302KD	35 35 32.0 80 37 44.0	84.000 319	9.9 552	72.8 Capstar Tx, Llc, As Debtor	76.8	22.7
291C2 Waxhaw	WOLS	LIC	NCX NC	215.3 34.7	163.00 BLH20081014ADN	34 53 01.0 80 47 37.0	21.000 188	121.5 358	47.3 Ghb Of Waxhaw, Inc.	29.8	91.4

Terrain database is NED 03 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference Zone= East Zone, Co to 3rd adjacent.  
All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtlt(Y,N,X)  
\*\*\*affixed to 'IN' or 'OUT' values = site inside restricted contour.  
« = Station meets FCC minimum distance spacing for its class.

Short space to second-adjacent WVBZ Clemmons, NC will be cured through the use of Section 74.1204(d).

WEJM-LP was ordered to Channel 260 in BPL-20180517AET. WEJM-LP has now filed a Form 319 Low Power FM Broadcast License Application.

**Bromo Communications, Inc.**

## Clearance to WVBZ

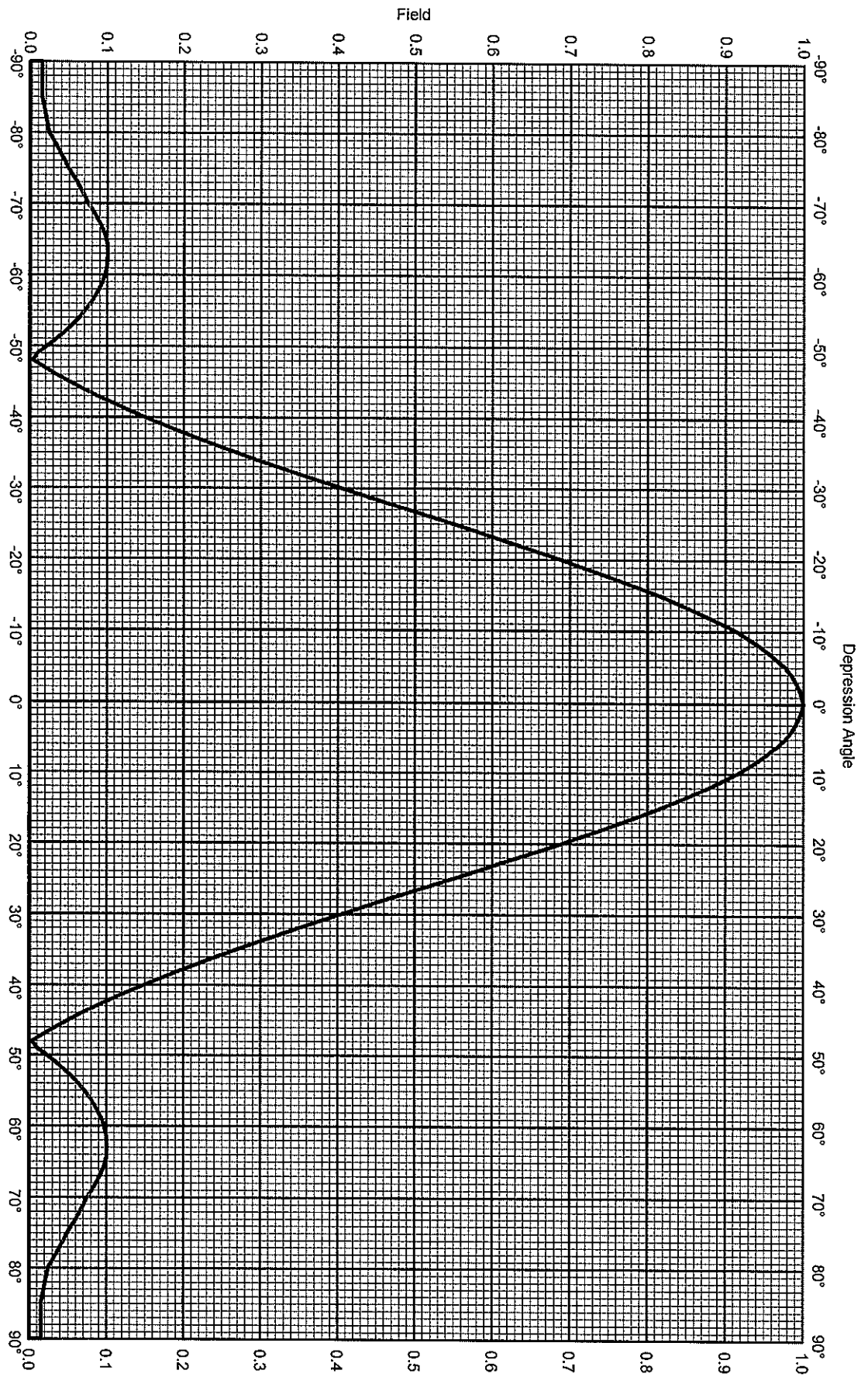
This instant translator application clears all allocation constraints of Section 74.1204. On first glance, it appears that interference is created to second-adjacent WVBZ, Clemmons, NC. However, Section 74.1204(d) instructs us:

*“In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.”*

WVBZ places 64.2 dBu over the proposed translator site. Adding the 40 dBu U/D ratio to the 64.2 dBu signal produces an interfering contour of 104.2 dBu. Kathrein/Scala, the manufacturer of the CL-FM antenna, was contacted in order to get the vertical radiation pattern of this antenna. Two stacked CL-FM antennas are proposed. Using this pattern, a precise graph of the 104.2 dBu contour was drawn and is a part of this exhibit. This interfering contour does not get any closer than 3.8 meters to the ground. This is created by the 20 degree elevation of the antenna. This lowest point occurs 442.8 meters from the tower base. No tall buildings/structures were identified in this general area. With the interfering contour remaining in the air, it is clear that no person will experience interference to WVBZ.

In conclusion, based on the foregoing explanation showing that no persons will receive interference, it is thought this application is in compliance with Section 74.1204 using Section 74.1204(d).

**Bromo Communications, Inc.**



Two CL-FM/HRM/50N Log-periodic Antennas

Oriented at 0 degrees

88 - 108 MHz

Gain: 9.5 dBd (x 8.9)

Horizontal Polarization

Vertical stacked 0.67 wavelength

Vertical plane Pattern

**KATHREIN**  
SCALA DIVISION



Post Office Box 4580  
Medford, OR 97501 (USA)  
Phone: (541) 779-6500  
Fax: (541) 779-3991  
<http://www.kathrein-scala.com>



**KATHREIN**  
**SCALA DIVISION**

Two CL-FM/HRM/50N Log-periodic Antennas

Oriented at 0 degrees

88 - 108 MHz

Gain: 9.5 dBd (x 8.9)

Horizontal Polarization

Vertical stacked 0.67 wavelength

Vertical plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
-90	0.015	-36.32	-26.82	0.00	-45	0.051	-25.87	-16.37	0.02
-89	0.015	-36.33	-26.83	0.00	-44	0.069	-23.28	-13.78	0.04
-88	0.015	-36.34	-26.84	0.00	-43	0.087	-21.19	-11.69	0.07
-87	0.015	-36.37	-26.87	0.00	-42	0.107	-19.42	-9.92	0.10
-86	0.015	-36.40	-26.90	0.00	-41	0.128	-17.89	-8.39	0.14
-85	0.015	-36.44	-26.94	0.00	-40	0.149	-16.53	-7.03	0.20
-84	0.017	-35.41	-25.91	0.00	-39	0.171	-15.32	-5.82	0.26
-83	0.019	-34.50	-25.00	0.00	-38	0.194	-14.23	-4.73	0.34
-82	0.021	-33.71	-24.21	0.00	-37	0.218	-13.21	-3.71	0.43
-81	0.022	-33.00	-23.50	0.00	-36	0.243	-12.29	-2.79	0.53
-80	0.024	-32.37	-22.87	0.01	-35	0.269	-11.42	-1.92	0.64
-79	0.029	-30.61	-21.11	0.01	-34	0.294	-10.62	-1.12	0.77
-78	0.035	-29.19	-19.69	0.01	-33	0.321	-9.86	-0.36	0.92
-77	0.040	-28.02	-18.52	0.01	-32	0.349	-9.15	0.35	1.08
-76	0.045	-27.03	-17.53	0.02	-31	0.377	-8.48	1.02	1.27
-75	0.049	-26.19	-16.69	0.02	-30	0.405	-7.85	1.65	1.46
-74	0.055	-25.18	-15.68	0.03	-29	0.433	-7.26	2.24	1.67
-73	0.061	-24.33	-14.83	0.03	-28	0.462	-6.71	2.79	1.90
-72	0.066	-23.61	-14.11	0.04	-27	0.491	-6.18	3.32	2.15
-71	0.071	-22.99	-13.49	0.04	-26	0.520	-5.68	3.82	2.41
-70	0.075	-22.47	-12.97	0.05	-25	0.549	-5.20	4.30	2.69
-69	0.081	-21.78	-12.28	0.06	-24	0.578	-4.77	4.73	2.97
-68	0.087	-21.21	-11.71	0.07	-23	0.606	-4.36	5.14	3.27
-67	0.092	-20.74	-11.24	0.08	-22	0.634	-3.96	5.54	3.58
-66	0.096	-20.37	-10.87	0.08	-21	0.661	-3.59	5.91	3.90
-65	0.099	-20.07	-10.57	0.09	-20	0.689	-3.23	6.27	4.23
-64	0.100	-19.97	-10.47	0.09	-19	0.715	-2.91	6.59	4.56
-63	0.101	-19.93	-10.43	0.09	-18	0.741	-2.60	6.90	4.89
-62	0.100	-19.96	-10.46	0.09	-17	0.766	-2.32	7.18	5.23
-61	0.099	-20.06	-10.56	0.09	-16	0.791	-2.04	7.46	5.57
-60	0.097	-20.24	-10.74	0.08	-15	0.815	-1.78	7.72	5.91
-59	0.094	-20.56	-11.06	0.08	-14	0.836	-1.55	7.95	6.24
-58	0.089	-20.97	-11.47	0.07	-13	0.857	-1.34	8.16	6.55
-57	0.084	-21.48	-11.98	0.06	-12	0.878	-1.13	8.37	6.87
-56	0.078	-22.12	-12.62	0.05	-11	0.897	-0.94	8.56	7.17
-55	0.071	-22.92	-13.42	0.05	-10	0.915	-0.77	8.73	7.47
-54	0.064	-23.94	-14.44	0.04	-9	0.930	-0.63	8.87	7.70
-53	0.055	-25.23	-15.73	0.03	-8	0.944	-0.51	8.99	7.93
-52	0.045	-26.94	-17.44	0.02	-7	0.956	-0.39	9.11	8.14
-51	0.034	-29.29	-19.79	0.01	-6	0.967	-0.29	9.21	8.34
-50	0.023	-32.92	-23.42	0.00	-5	0.977	-0.20	9.30	8.50
-49	0.010	-40.00	-30.50	0.00	-4	0.984	-0.14	9.36	8.63
-48	0.010	-40.00	-30.50	0.00	-3	0.990	-0.09	9.41	8.73
-47	0.018	-34.67	-25.17	0.00	-2	0.995	-0.05	9.45	8.82
-46	0.034	-29.33	-19.83	0.01	-1	0.998	-0.02	9.48	8.87
					0	1.000	0.00	9.50	8.91



Two CL-FM/HRM/50N Log-periodic Antennas

Oriented at 0 degrees

88 - 108 MHz

Gain: 9.5 dBd (x 8.9)

Horizontal Polarization

Vertical stacked 0.67 wavelength

Vertical plane Pattern

Angle	Field	Rel.dB	dBd	PwrMult	Angle	Field	Rel.dB	dBd	PwrMult
0	1.000	0.00	9.50	8.91	45	0.051	-25.87	-16.37	0.02
1	0.998	-0.02	9.48	8.87	46	0.034	-29.33	-19.83	0.01
2	0.995	-0.05	9.45	8.82	47	0.018	-34.66	-25.16	0.00
3	0.990	-0.09	9.41	8.73	48	0.010	-40.00	-30.50	0.00
4	0.984	-0.14	9.36	8.63	49	0.010	-40.00	-30.50	0.00
5	0.977	-0.20	9.30	8.50	50	0.023	-32.92	-23.42	0.00
6	0.967	-0.29	9.21	8.34	51	0.034	-29.29	-19.79	0.01
7	0.956	-0.39	9.11	8.14	52	0.045	-26.94	-17.44	0.02
8	0.944	-0.50	9.00	7.93	53	0.055	-25.23	-15.73	0.03
9	0.930	-0.63	8.87	7.70	54	0.064	-23.94	-14.44	0.04
10	0.915	-0.77	8.73	7.47	55	0.071	-22.92	-13.42	0.05
11	0.897	-0.94	8.56	7.17	56	0.078	-22.12	-12.62	0.05
12	0.878	-1.13	8.37	6.87	57	0.084	-21.48	-11.98	0.06
13	0.858	-1.34	8.16	6.55	58	0.089	-20.97	-11.47	0.07
14	0.836	-1.55	7.95	6.24	59	0.094	-20.56	-11.06	0.08
15	0.815	-1.78	7.72	5.91	60	0.097	-20.24	-10.74	0.08
16	0.791	-2.04	7.46	5.57	61	0.099	-20.06	-10.56	0.09
17	0.766	-2.32	7.18	5.23	62	0.100	-19.96	-10.46	0.09
18	0.741	-2.60	6.90	4.89	63	0.101	-19.93	-10.43	0.09
19	0.715	-2.91	6.59	4.56	64	0.100	-19.97	-10.47	0.09
20	0.689	-3.23	6.27	4.23	65	0.099	-20.07	-10.57	0.09
21	0.661	-3.59	5.91	3.90	66	0.096	-20.37	-10.87	0.08
22	0.634	-3.96	5.54	3.58	67	0.092	-20.74	-11.24	0.08
23	0.606	-4.36	5.14	3.27	68	0.087	-21.21	-11.71	0.07
24	0.578	-4.77	4.73	2.97	69	0.081	-21.78	-12.28	0.06
25	0.549	-5.20	4.30	2.69	70	0.075	-22.47	-12.97	0.05
26	0.520	-5.68	3.82	2.41	71	0.071	-22.99	-13.49	0.04
27	0.491	-6.18	3.32	2.15	72	0.066	-23.61	-14.11	0.04
28	0.462	-6.71	2.79	1.90	73	0.061	-24.33	-14.83	0.03
29	0.433	-7.26	2.24	1.67	74	0.055	-25.18	-15.68	0.03
30	0.405	-7.85	1.65	1.46	75	0.049	-26.19	-16.69	0.02
31	0.377	-8.48	1.02	1.27	76	0.045	-27.03	-17.53	0.02
32	0.349	-9.15	0.35	1.08	77	0.040	-28.02	-18.52	0.01
33	0.321	-9.86	-0.36	0.92	78	0.035	-29.19	-19.69	0.01
34	0.294	-10.62	-1.12	0.77	79	0.029	-30.61	-21.11	0.01
35	0.269	-11.42	-1.92	0.64	80	0.024	-32.37	-22.87	0.01
36	0.243	-12.29	-2.79	0.53	81	0.022	-33.00	-23.50	0.00
37	0.218	-13.21	-3.71	0.43	82	0.021	-33.71	-24.21	0.00
38	0.194	-14.23	-4.73	0.34	83	0.019	-34.50	-25.00	0.00
39	0.171	-15.32	-5.82	0.26	84	0.017	-35.41	-25.91	0.00
40	0.149	-16.53	-7.03	0.20	85	0.015	-36.44	-26.94	0.00
41	0.128	-17.89	-8.39	0.14	86	0.015	-36.40	-26.90	0.00
42	0.107	-19.42	-9.92	0.10	87	0.015	-36.37	-26.87	0.00
43	0.087	-21.19	-11.69	0.07	88	0.015	-36.34	-26.84	0.00
44	0.069	-23.28	-13.78	0.04	89	0.015	-36.33	-26.83	0.00
					90	0.015	-36.32	-26.82	0.00



### 104.2 dBu Interference Two Kathrein CL-FM (Horizontal)

