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ENGINEERING REPORT

Amendment to
APPLICATION for FACILITIES CHANGE:
BP-20020208ABB

TRANSMITTER SITE CHANGE
&
POWER INCREASE

WPET (AM) 950 kHz
GREENSBORO, NC

540 Watts Daytime, 41 Watts Nighttime

Entercom Greensboro License, LLC

June 2002

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1. Purpose of Application

This engineering report is part of an application by Entercom Greensboro License, LLC to change the transmitter site of WPET (AM), Greensboro, NC. The proposed operation will be diplexed with WEAL (AM). This amendment corrects deficiencies noted in the Commissions letter of dismissal dated May 30, 2002. The issues raised in the dismissal letter were as follows:

- a. Failure to reduce the nighttime skywave interference contribution of WPET toward WORD by 10% as required by §73.182
- b. Failure to submit a tower sketch
- c. Antenna system does not meet minimum efficiency standards.

The amended application specifies a taller antenna structure, thus increasing efficiency to above the minimum acceptable value of 282 mV/m/km. Daytime power is reduced to 540Watts to maintain the same RMS as the previous application, therefore there are no changes in the daytime coverage exhibits. In addition, the ground system specified in the previous application was found to be incorrect. Exhibit 10-1 now identifies the ground system as specified in the WEAL license document. Discussions with Commission staff have also confirmed that tower sketches are no longer required. This amendment requests a waiver of §73.182 with respect to WORD, on the basis that this move is being forced by conditions beyond the control of the licensee.

2. Allocation Considerations

All computations contained in this report are based on data taken from the January 30, 2002 edition of the FCC AM database. M3 conductivities were used in all cases.

a. Daytime

The proposed 540 Watt non-directional operation will not cause any new prohibited overlap with any known station in the U. S. or Canada, as shown in exhibits 14-1 through 14-4. Existing overlap with co-channel station WORD, Spartanburg, SC will be reduced by this proposal, as shown in Exhibit 14-5. The daytime operation will be the same as the critical hours operation, as there are no Class A stations on 950 kHz in the US or Canada.

b. Nighttime

All domestic stations on 950 kHz and 1st adjacent channels, and all co-channel international stations within 10,000 km were considered in the preparation of Exhibit 15-1, the site to site RSS calculations. The licensed operation of WPET enters into the 50% limit of two stations (WORD and WVTS). The proposed nighttime operation reduces the radiation level of WPET toward WVTS by 14%, and toward WORD by 0.7%. The licensee does not own the licensed transmitter site or tower, and has been required to vacate the site as soon as possible as a condition of their lease. As this transmitter site move is being made in response to matters beyond the control of the licensee, waiver of the 10% ratchet rule provisions of §73.182 with respect to WORD is respectfully requested. Entercom is also the licensee of WORD, and does not object. There are no nighttime community coverage requirements for Class D stations, therefore, this report contains no nighttime coverage exhibits.

3. Facilities Proposed

Entercom Greensboro License, LLC proposes continued operation of WPET on 950 kHz with an operating power of 540 Watts day and 41 Watts night, using a non-directional antenna. The proposed operation will be at the presently licensed site of WEAL (AM). The existing WEAL tower will be increased in height from 180 feet to 267 feet in order to achieve minimum efficiency at 950 kHz. The existing tower is skirt-fed, as the proposed tower will be. FAA notification of the proposed height increase has been filed. As Entercom Greensboro License, LLC is the licensee for both WPET and WEAL, they will be solely responsible for all filter installation and adjustment, as necessary to suppress any intermodulation products or other spurious emissions.

Antenna tower access is restricted by a fence with a locked gate that is greater than 2 meters from the tower base as required by OST-65. The antenna tower is posted with warning signs, and all station personnel and contractors will be required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

SECTION III-A AM 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. Frequency: _____ kHz
2. Class: ☐ A ☐ B ☐ C ☐ D
3. Hours of Operation: ☐ Unlimited ☐ Limited ☐ Daytime ☐ Share Time ☐ Specified Hours: _____
4. **Daytime Operation:** ☐ Yes ☐ No
 - a. Power: _____ kW
 - b. Antenna Location Coordinates: (NAD 27)

_____	°	_____	'	_____	"	<input type="checkbox"/>	N	<input type="checkbox"/>	S	Latitude
_____	°	_____	'	_____	"	<input type="checkbox"/>	E	<input type="checkbox"/>	W	Longitude
 - c. **Nondirectional:** ☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical RMS: _____ mV/m at 1 km

Tower	
Overall height above ground (include obstruction lighting)	
Antenna structure registration	<div style="text-align: center;">_____</div> <div>Number</div> <div><input type="checkbox"/> Notification filed with FAA</div> <div><input type="checkbox"/> Not applicable</div>
Height of radiator above base insulator, or above base, if grounded	
Electrical height of radiator (degrees)	
Top-Loaded/Sectionalized apparent height	
A	
B	
C	
D	

TECH BOX - DAYTIME OPERATION

d. Directional:

☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical RMS: _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting)				
Antenna structure registration	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded				
Electrical height of radiator (degrees)				
Field ratio				
Phase				
Spacing				
Tower orientation				
Tower reference switch				
Top-Loaded/Sectionalized apparent height				
A				
B				
C				
D				

Augmented:

☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth

Span

Augmentation radiation

TECH BOX - NIGHTTIME OPERATION

5. Nighttime Operation:

☐ Yes ☐ No

a. Power: _____ kW

b. Antenna Location Coordinates: (NAD 27)

_____ ° _____ ' _____ " ☐ N ☐ S Latitude
 _____ ° _____ ' _____ " ☐ E ☐ W Longitude

c. Nondirectional:

☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical RMS: _____ mV/m at 1 km

Tower	
Overall height above ground (include obstruction lighting)	
Antenna structure registration	<p>_____ Number</p> <p><input type="checkbox"/> Notification filed with FAA</p> <p><input type="checkbox"/> Not applicable</p>
Height of radiator above base insulator, or above base, if grounded	
Electrical height of radiator (degrees)	
Top-Loaded/Sectionalized apparent height	
A	
B	
C	
D	

TECH BOX - NIGHTTIME OPERATION

d. Directional:

☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical RMS: _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting)				
Antenna structure registration	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded				
Electrical height of radiator (degrees)				
Field ratio				
Phase				
Spacing				
Tower orientation				
Tower reference switch				
Top-Loaded/Sectionalized apparent height				
A				
B				
C				
D				

Augmented:

☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth

Span

Augmentation radiation

TECH BOX - CRITICAL HOURS OPERATION

6. Critical Hours Operation:

☐ Yes ☐ No

a. Power: _____ kW

b. Antenna Location Coordinates: (NAD 27)

_____ ° _____ ' _____ " ☐ N ☐ S Latitude
 _____ ° _____ ' _____ " ☐ E ☐ W Longitude

c. **Nondirectional:**

☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical RMS: _____ mV/m at 1 km

Tower	
Overall height above ground (include obstruction lighting)	
Antenna structure registration	<p>_____ Number</p> <p><input type="checkbox"/> Notification filed with FAA</p> <p><input type="checkbox"/> Not applicable</p>
Height of radiator above base insulator, or above base, if grounded	
Electrical height of radiator (degrees)	
Top-Loaded/Sectionalized apparent height	
A	
B	
C	
D	

TECH BOX - CRITICAL HOURS OPERATION

d. Directional:

☐ Yes ☐ No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical RMS: _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting)				
Antenna structure registration	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<div>Number</div> <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded				
Electrical height of radiator (degrees)				
Field ratio				
Phase				
Spacing				
Tower orientation				
Tower reference switch				
Top-Loaded/Sectionalized apparent height				
A				
B				
C				
D				

Augmented:

☐ Yes ☐ No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth

Span

Augmentation radiation

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

7. **Broadcast Facility.** The proposed facility complies with the engineering standards and assignment requirements of 47 C.F.R. Sections 73.24(e), 73.24(g), 73.33, 73.45, 73.150, 73.152, 73.160, 73.182(a)-(i), 73.186, 73.189, 73.1650. **Exhibit Required.** ☐ Yes ☐ No

Exhibit No.

See Explanation in Exhibit No.
8. **Community Coverage.** The proposed facility complies with community coverage requirements of 47 C.F.R. Section 73.24(i). ☐ Yes ☐ No

Exhibit No.

See Explanation in Exhibit No.
9. **Main Studio Location.** The proposed main studio location complies with requirements of 47 C.F.R. Section 73.1125. ☐ Yes ☐ No

Exhibit No.

See Explanation in Exhibit No.
10. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all those that apply. An exhibit is required for each applicable section.
- Groundwave.**
- a. ☐ 47 C.F.R. Section 73.37

Exhibit No.
- Skywave.**
- b. ☐ 47 C.F.R. Section 73.182.

Exhibit No.
- Critical Hours.**
- c. ☐ 47 C.F.R. Section 73.187.

Exhibit No.
11. **Environmental Protection Act.** 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 **Exhibit is required.** ☐ Yes ☐ No

Exhibit No.

See Explanation in Exhibit No.

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.

PREPARER'S CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

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		Relationship to Applicant (e.g., Consulting Engineer)	
Signature		Date	
Mailing Address			
City		State or Country (if foreign address)	ZIP Code
Telephone Number (include area code)		E-Mail Address (if available)	

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).

6. Statement of Engineer

This Engineering Report, relative to a site change & power increase for WPET (AM) Greensboro, NC has been prepared under my direct supervision. All representations contained herein are true to the best of my knowledge. I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am an engineer in the firm of Hatfield and Dawson Consulting Engineers and am Registered as a Professional Engineer in the State of Washington.

Signed this 24th day of June, 2002



Thomas S. Gorton, P.E.