

JAMES B. HATFIELD, PE
BENJAMIN F. DAWSON III, PE
THOMAS M. ECKELS, PE
STEPHEN S. LOCKWOOD, PE
DAVID J. PINION, PE

PAUL W. LEONARD, PE
ERIK C. SWANSON, EIT
THOMAS S. GORTON, PE

HATFIELD & DAWSON
CONSULTING ELECTRICAL ENGINEERS
9500 GREENWOOD AVE. N.
SEATTLE, WASHINGTON 98103

TELEPHONE
(206) 783-9151
FACSIMILE
(206) 789-9834
E-MAIL
hatdaw@hatdaw.com

MAURY L. HATFIELD, PE
CONSULTANT
Box 1326
ALICE SPRINGS, NT 5950
AUSTRALIA

ENGINEERING REPORT

APPLICATION FOR CONSTRUCTION PERMIT for a NEW TRANSMITTER SITE

WBZU-AM
910 kHz
Facility ID 36200

Scranton, PA
900 Watts Day, 440 Watts Night

Entercom Wilkes-Barre Scranton, LLC

March 2006

TABLE OF CONTENTS

1. Purpose of Application
2. Allocation Considerations
3. Facilities Proposed
4. Exhibits Per FCC Form 301, Section III-A
 - a. Exhibit 11-1 Antenna Site Plat
 - b. Exhibit 11-2 Antenna Site Map
 - c. Exhibit 11-3 Site Photographs
 - d. Exhibit 12-1 Licensed & Proposed Daytime Coverage of City of License
 - e. Exhibit 12-2 Licensed & Proposed Coverage Contours
 - f. Exhibit 12-3 Licensed & Proposed Nighttime Coverage of City of License
 - g. Exhibit 15-1 Daytime Co-Channel Allocation Study
 - h. Exhibit 15-2 Daytime 1st-adjacent Channel Allocation Study
 - i. Exhibit 15-3 Daytime 2nd-adjacent Channel Allocation Study
 - j. Exhibit 15-4 Tabulation of Azimuths, Fields & Conductivities
 - k. Exhibit 16-1 Site to Site RSS Calculations
 - l. Exhibit 16-2 RSS Calculations for Proposed Facility
5. FCC Form 301, Section III-A
6. Statement of Engineer

1. Purpose of Application

This Engineering Report is part of an application by Entercom Wilkes-Barre Scranton, LLC for a Construction Permit to change the transmitter location of WBZU-AM, Scranton, PA. The transmitter site specified in this application is that of WEJL-AM 630 kHz Scranton.

Diplexed operation with WEJL is proposed. The owner of the presently licensed WBZU transmitter site has informed the licensee that lease will not be renewed when it expires. The transmitter site change requested in this application is therefore a “forced move” due to circumstances beyond the control of the licensee.

2. Allocation Considerations

a. Daytime

All computations contained in this report are based on data taken from the February 24, 2006 edition of the FCC AM database. No third-adjacent channel study maps are included, as there are no third-adjacent channel stations within 100 km. M3 conductivities were used in all cases, except for the proposed WBZU transmitter site, and for the licensed operation of 1st-adjacent channel station WGHQ, Kingston, NY. The measured data used for WGHQ is taken from a partial proof of performance filed by the licensee of WGHQ in January, 1974. The measurement data used for the proposed WBZU site is taken from WEJL’s 1999 application for a daytime power increase.

The proposed 900 watt daytime operation of WBZU causes prohibited contour overlap with three co-channel stations: WRKL, New York, WSBA, York, PA and WLAT, New Britain, CT. Existing overlap to and from each of these stations is reduced by this proposal, as demonstrated in the Overlap Reduction Showing in Exhibit 15.

b. Nighttime

The proposed 440 Watt nighttime operation enters into the 25% RSS calculations of the following co-channel facilities:

CKLY	Lindsay, ON
CHRL	Roberval, QC
WLAT	New Britain, CT
WABI	Bangor, ME
WFDF	Farmington, MI
WRKL	New York, NY
WSBA	York, PA
WJCW	Johnson City, TN
WRNL	Richmond, VA

The interference contribution to each of these facilities from the proposed WBZU operation is less than that of the licensed operation. Individual site to site RSS calculations are shown in Exhibit 16-1. Waiver of the so called “ratchet rule” provision of §73.182 with respect to WLAT, WABI, WFDF, WRKL, WSBA and WRNL is respectfully requested. The transmitter relocation requested in this application is due to circumstances beyond the control of the licensee; the expiration of the lease on the present transmitter site and the unwillingness of the landlord to entertain renewal of the lease due to site development plans which are incompatible with a transmission tower.

The 7 mV/m Nighttime Interference-free contour of the proposed WBZU operation will cover 100% of the population and over 90% of the area of Scranton.

3. Facilities Proposed

Entercom Wilkes-Barre Scranton, LLC proposes operation of WBZU, with a daytime power of 900 watts and a nighttime power of 440 watts, both using a non-directional antenna. Diplexed operation with WEJL 630 Scranton is proposed. No new tower construction will be required. The Antenna Structure Registration number for this tower is 1039830.

This antenna tower is mounted on the rooftop of the Scranton Times Building in downtown Scranton. The ground system consists of a steel plate, 23.8 meters by 52.7 meters. The steel plate is bonded to the structural steel of the building. The licensed RMS of WEJL, operating on 630 kHz from this tower is 398.24 mV/m/km at 2 kW. Applying this RMS and tower height (67.6°) to Figure 8 yields an antenna efficiency equal to that of a 67.6° tower over a standard ground system with a radius of 78° . Adjusting these figures for WBZU's operating frequency (910 kHz) yields a tower height of 97.6° and a ground system radius of 112° . Applying these values to Figure 8 yields an RMS of 310.7 mV/m/km/kw. This is the RMS used throughout this application for the proposed operation of WBZU.

Rooftop access, and therefore antenna tower access is restricted by a locked door, 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.

6. Statement of Engineer

This Engineering Report, relative to an application for a Construction Permit to change the transmitter site of WBZU-AM, Scranton, PA has been prepared by the undersigned. 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 States of Washington and Oregon.

Signed this 10th day of March, 2006



Thomas S. Gorton, P.E.

Hatfield & Dawson Consulting Engineers