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## ENGINEERING REPORT

AMENDMENT to APPLICATION for CONSTRUCTION PERMIT  
BMJP-20001023AEH  
for FACILITIES CHANGE:  
NEW TRANSMITTER SITE  
& POWER INCREASE

WRCA (AM) 1330 kHz  
WATERTOWN, MASSACHUSETTS  
25 kW Day, 17 kW Night DA-2

WRCA License, LLC

July 2002

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## 1. Purpose of Application

This engineering report is part of an application by WRCA License, LLC to modify its application for Construction Permit BMJP-20001023AEH, to move WRCA (AM) Waltham, MA to a new transmitter site, increase power to 25 kW day and 17 kW night and change the city of license to Watertown, MA. The proposed operation will be at the licensed site of WUNR (AM) Brookline, MA.

## 2. Allocation Considerations

All computations contained in this report are based on data taken from the June 29, 2002 edition of the FCC AM database. M3 conductivities were used for all stations except WRCA, where measured conductivities were used. Conductivity data for the WUNR site (the proposed WRCA site) is based on measurements taken by Michael J. Klein, Contract Engineer of WRCA, as well as data from the 1977 WUNR application for license on file with the Commission.

### a. Daytime

The proposed 25 kW 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 WARL, WDER and WWNH will be reduced by this proposal.

### b. Nighttime

All domestic stations on 1330 kHz and 1<sup>st</sup> adjacent channels, and all co-channel international stations within 10,000 km were considered in the preparation of Exhibit 15-1, the limits to the proposed operation. Only those stations with limits below 5,000 mV/m are shown in the exhibit. RSS calculations for individual stations are provided in Exhibit 15-2 for all stations where WRCA is a contributor.

### 3. Facilities Proposed

WRCA License, LLC proposes continued operation of WRCA on 1330 kHz with an operating power of 25 kW day and 17 kW night, using different directional patterns for daytime and nighttime operation. (DA-2) The proposed operation will be at the presently licensed site of WUNR, Brookline, MA. The two existing 350 foot tall towers used by WUNR are to be removed, and replaced by five 195 foot tall towers to form an array to be used by WUNR, WKOX and WRCA. As the proposed towers are all below 200 feet in height, and at least 6 miles from the nearest airport, FAA notification and FCC tower registration are not required.

Antenna tower access will be restricted by a fences with locked gates that will be greater than 4 meters from the tower bases as required by OST-65. The antenna towers will be 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 towers, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

## 6. Statement of Engineer

This Engineering Report, relative to a change in transmitter location and power increase for WRCA (AM) Watertown, MA 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 10<sup>th</sup> day of July, 2002



Thomas S. Gorton, P.E.