

AMENDMENT TO
APPLICATION FOR CONSTRUCTION PERMIT INFORMATION
RADIO STATION WMTN
MORRISTOWN, TENNESSEE

1300 KHZ 5 KW-D 96 W-N U ND

December 24, 2015

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Executive Summary - WMTN

This engineering exhibit is to amend the pending application for construction permit of radio station WMTN in Morristown, Tennessee, file number BP-20151005AAP. It is a replacement engineering exhibit and specifies the tower height to be 150 feet instead of the 160 foot height that was specified in the original application. The 160 foot height was derived from the FCC's Consolidated Database System ("CDBS") entry for WMTN. An inspection of the tower and a subsequent investigation revealed that the FCC's CDBS height is in error. No change to the pending application other than the tower height is being made by this amendment.

The pending application and this amendment have been prepared on behalf of Radio Acquisition Corp., licensee of AM broadcast station WMTN at Morristown, Tennessee. WMTN is licensed as a Class D station for operation on 1300 kilohertz with power of 5 kilowatts daytime and with a 96 watt secondary nighttime authorization. A non-directional antenna is utilized during both daytime and nighttime hours. By means of this pending application, the licensee proposes to update the transmitter site location coordinates as given on the existing license and describe the ground system following changes made to accommodate lower frequency station WCRK that is simultaneously filing an application for construction permit to diplex at the site.. No other changes are proposed with this application.

This update was recently found to be necessary by comparison of the licensed transmitter site coordinates - which date from when the station was first constructed - with the more recently determined coordinates.

The updated NAD27 coordinates as determined from satellite imagery analysis are:

36-12-25 N
83-19-59 W

The current license states the station's coordinates as:

36-12-15 N
83-19-57 W

The ground system of the existing WMTN tower will accommodate the co-location of WCRK with 120 equally-spaced buried copper wire radials surrounding the tower within the property boundaries having an average length of 65.2 meters – exceeding the requirements for a standard ground system at the WMTN frequency. An additional 120 copper wire radials, 15.2 meters in length, will be interspersed with the longer radials about the tower base.

When comparing the licensed with the updated coordinates, a discrepancy of 10 second in the North Latitude and 2 seconds in West Longitude exists. Item 1, shows the coordinates plotted on a satellite photo. As can be seen on Item 1, the updated coordinates are correct. Also, a daytime allocation study, as shown on Item 2, is included supporting a conclusion that this proposal comports with all interference protection requirements.

There is no actual change in the contour overlap between WMTN and other stations, as the tower location is not changed, but Item 2 shows that there would be a net reduction in grandfathered overlap if an actual change were being made.

It is requested that a construction permit be issued with the new set of coordinates but that the requirement for antenna resistance measurements be suspended as the station's physical location has not changed and no changes are being made to the licensed antenna system.



Matthew Folkert

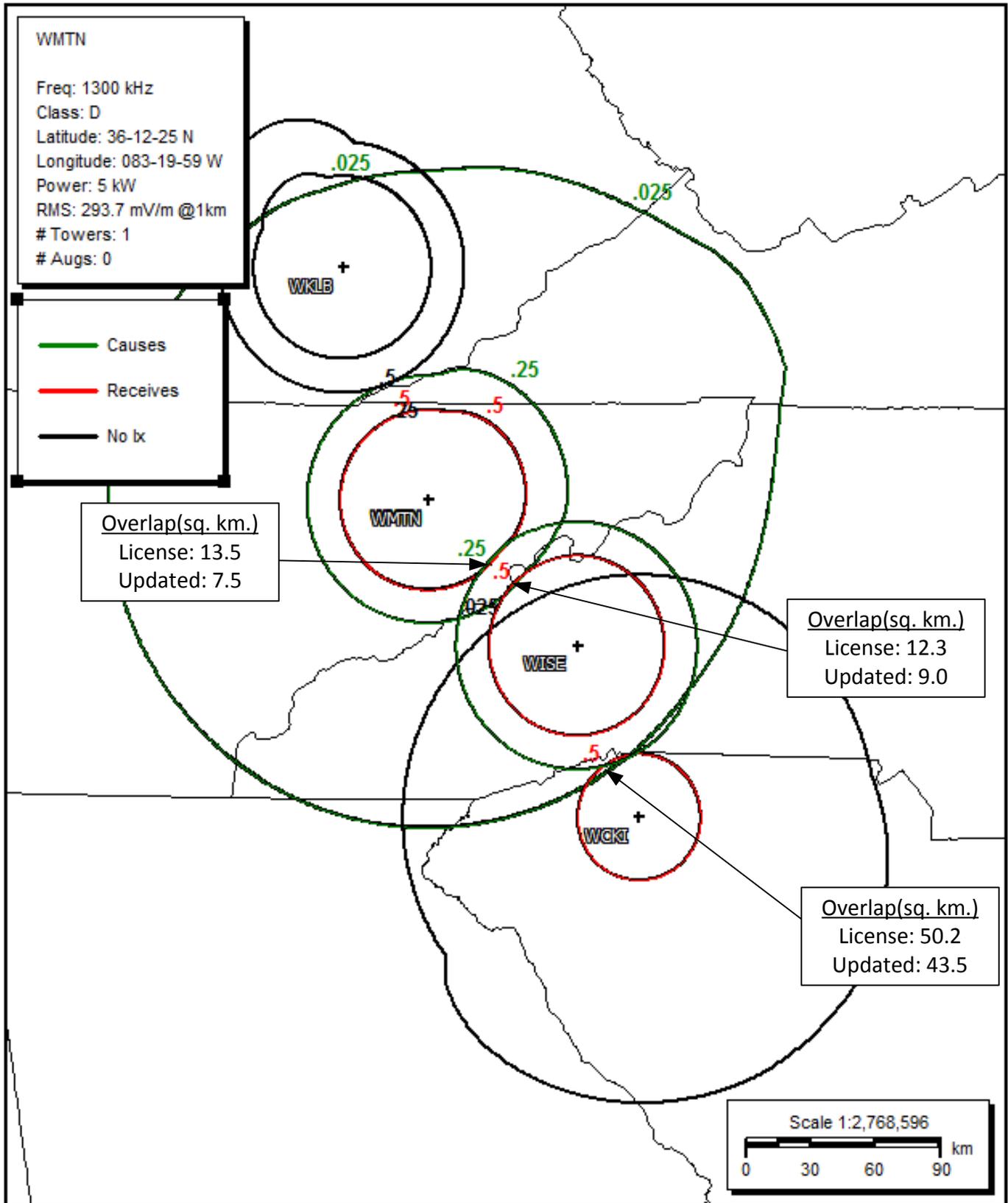
December 24, 2015



SITE LOCATIONS

RADIO STATION WMTN
MORRISTOWN, TENNESSEE
1300 KHZ 5 KW-D 96 W-N U ND

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



DAYTIME ALLOCATION STUDY

RADIO STATION WMTN
MORRISTOWN, TENNESSEE
1300 KHZ 5 KW-D 96 W-N U ND

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Tower Height - WMTN

The pending application that is being amended, file number BP-20151005AAP, specified a radiating element height of 160 feet. This was based on information from the FCC's CDBS, which specifies the height to be 76.3 electrical degrees at the WMTN frequency, 1300 kHz.

A visual inspection of the tower, pertinent to planning for the installation of the new antenna matching and filtering equipment when WCRK moves to use the WMTN tower, revealed its physical height to be 150 feet. The tower was originally constructed as one tower of a two-tower directional antenna in 1957 and later it was licensed for nondirectional operation by WMTN with no change to its height.

An investigation of paper records obtained from the FCC revealed that the height of the tower is, and always has been, 150 feet and that the CDBS electrical height is incorrect. See the directional antenna pattern page from the 1957 application for license and the 1981 nondirectional license on the following pages.

This amendment corrects the proposed height. Once the construction permit has been implemented and the new license issued, the CDBS should specify the correct electrical height.

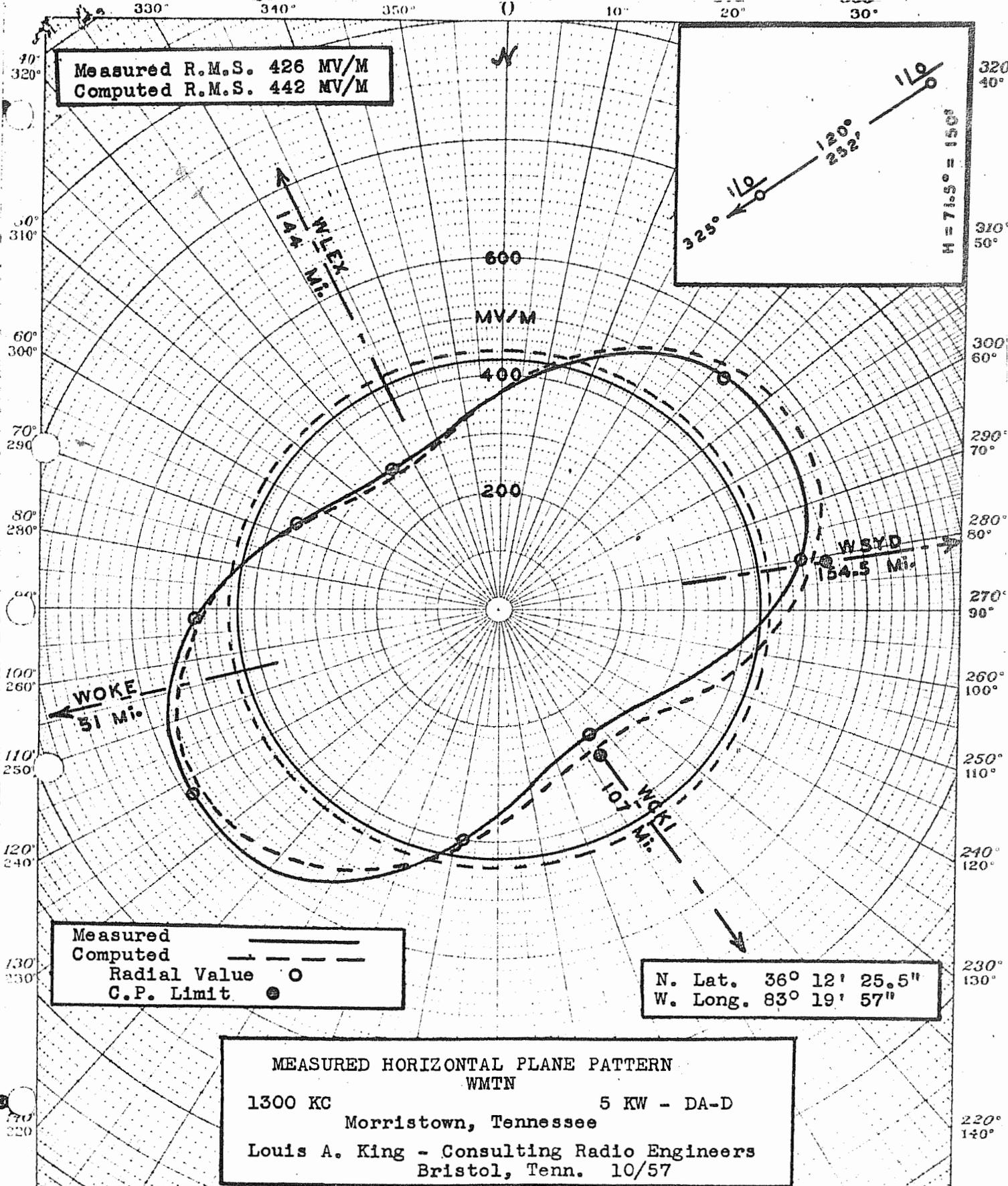
MEASURED DAY
(12-20-57g)

Station WMTN
Morristown, Tennessee

5kw, DA-D,D

1300 KC

WMTN



Measured R.M.S. 426 MV/M
 Computed R.M.S. 442 MV/M

Measured ———
 Computed - - - -
 Radial Value ○
 C.P. Limit ●

N. Lat. 36° 12' 25.5"
 W. Long. 83° 19' 57"

MEASURED HORIZONTAL PLANE PATTERN
 WMTN
 1300 KC 5 KW - DA-D
 Morristown, Tennessee
 Louis A. King - Consulting Radio Engineers
 Bristol, Tenn. 10/57

WMTN

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No.: 87-810122A

Call Sign: WMTN

STANDARD BROADCAST STATION LICENSE
MODIFIED

Subject to the provisions of the Communications Act of 1934, subsequent Acts, and Treaties, and Commission Rules made thereunder, and further subject to conditions set forth in this license, ^{1/}the LICENSEE

TART TENNESSEE BROADCASTING CORPORATION

is hereby authorized to use and operate the radio transmitting apparatus hereinafter described for the purpose of broadcasting for the term ending 3 a.m. Local Time AUGUST 1, 1982

The licensee shall use and operate said apparatus only in accordance with the following terms:

- On a frequency of 1300 kHz.
- With nominal power of watts nighttime and 5 kilo watts daytime,
with antenna input power of watts directional

	current	amperes
	resistance	ohms,

antenna nighttime

	current	<u>14.43</u> amperes
	resistance	<u>24</u> ohms

and antenna input power of 5 kilo watts non directional

	Antenna	
	Antenna	

antenna daytime

3. Hours of operation: Daytime as follows:

Jan. 7:45 am to 5:45 pm; Feb. 7:15 am to 6:15 pm;
 Mar. 6:45 am to 6:45 pm; Apr. 6:00 am to 7:00 pm;
 May 5:30 am to 7:30 pm; June 5:15 am to 7:45 pm;
 July 5:30 am to 7:45 pm; Aug. 5:45 am to 7:30 pm;
 Sep. 6:15 am to 6:45 pm; Oct. 6:45 am to 6:00 pm;
 Nov. 7:15 am to 5:30 pm; Dec. 7:30 am to 5:15 pm;
 Eastern Standard Time (Non-Advanced).

- With the station located at: Morristown, Tennessee
- With the main studio located at: P. O. Box 70, 510 W. Economy Road, Morristown, Tennessee
- Remote control point: ---

- Transmitter location: P. O. Box 70, 510 W. Economy Road, Morristown, Tennessee
 North Latitude: 36° 12' 15"
 West Longitude: 83° 19' 57"

Antenna and ground system: Single, guyed, series excited, steel radiator of uniform cross-section 150' in height (153' overall height). Theoretical efficiency is 182.9 mv/m/kw, day. GROUND SYSTEM: 120-200' equally-spaced, buried copper radials plus a 48' square copper ground screen at the base of the tower.

- Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715: None required.
- Transmitter(s): Type Accepted
- Conditions: ---

The Commission reserves the right during said license period of terminating this license or making effective any changes or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

^{1/}This license consists of this page and pages ---

Dated: February 27, 1981

FEDERAL
COMMUNICATIONS
COMMISSION

