



# ENGINEERING STUDY

WKTT(FM)

Application for a Minor License Modification

Channel 248A (97.5MHz)

Salisbury, MD

Facility ID 53489

June 2023

## **WKTT (FM)**

### **Application for a Minor License Modification**

#### **TECHNICAL STATEMENT**

This technical statement and attached exhibits were prepared on behalf of Rojo Broadcasting, LLC, licensee of radio station WKTT (FM), Channel 248A, Salisbury, MD. WKTT seeks to relocate to another tower 0.2km away from the currently licensed location and slightly increase both HAAT and power.

#### **ALLOCATION**

The proposed operation will utilize a non-directional antenna and will meet all contour protection requirements toward other stations as a full class A under 73.207 except for WAFL 249A. WKTT and WAFL operate pursuant to 73.213 grandfathered operation which allows two 3kW, 100m HAAT grandfathered Class A stations to operate with up to 6kW, 100m HAAT mutually. The allocation study attached as Exhibit A demonstrates that other than the 73.213 operation with respect to WAFL, WKTT is fully compliant under 73.207.

The proposed facility is not within 320km of any common border between the US and Mexico or Canada.

Exhibit B demonstrates that the proposed 70dBu noncommercial station's contour will completely encompass the Salisbury, MD Community of License.

**Proposed Facility Specifications**

Coordinates (NAD83)	38°-21'-37.4" N Latitude, 75°-37'-07.2" W Longitude
Tower ASR	1037390
Tower Overall AGL	127.4m
Site AMSL	6.4m
Antenna COR AGL	106.0m
Antenna COR AMSL	112.4m
Antenna HAAT	101m
Antenna Pattern	NON-Directional
Proposed Antenna	ERI LPX-4
ERP	5.8kW

**ENVIRONMENTAL CONSIDERATIONS**

The proposed WKTT antenna will operate at a maximum power level of 6kW H+V and will operate at 106m AGL. WKTT proposes to operate with a 4-bay, full-wave spaced non-directional antenna. Based upon the FCC online calculator “FM Model”<sup>1</sup> Power Density vs. Distance calculator using an EPA Type 3 Opposed U Dipole antenna, the maximum power density at 2m AGL is expected to be 3.2μW/cm<sup>2</sup> at 43 meters from the tower base, or 1.6% of the permitted 200 μW/cm<sup>2</sup> limit for uncontrolled exposure. There are no tall buildings within 500m of the proposed tower and there are no other non-excluded facilities operating on the tower. Based on the preceding, it is believed that the proposed WKTT facility will be in compliance with environmental requirements.

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<sup>1</sup> <https://www.fcc.gov/general/fm-model>

Radio station WKTT (FM) along with other users at the site will maintain an occupational safety policy and agrees to reduce power or cease operation during periods of maintenance to avoid potentially harmful exposure of personnel to non-ionizing RF radiation.

Respectfully Submitted

A handwritten signature in cursive script that reads "Bert Goldman". The signature is written in black ink and is positioned above the printed name.

Bert Goldman  
Technical Consultant

**EXHIBIT A- Allocation Study**

ComStudy 2.2 search of channel 248 (97.5 MHz Class A) at 38-21-37.4 N, 75-37-07.2 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE	
WAFL	MILFORD	DE 249 A	63.98	72.00	10.1	-8.0	73.213 OK
WAVD	OCEAN PINES	MD 246 A	32.01	31.00	89.7	1.0	73.207 OK
WBey-FM	CRISFIELD	MD 250 A	38.54	31.00	197.5	7.5	73.207 OK
WENJ	MILLVILLE	NJ 247 B	152.35	113.00	42.7	39.4	
WENJ	MILLVILLE	NJ 247 B	129.53	113.00	34.2	16.5	
WMDM	LEXINGTON PARK	MD 249 A	82.81	72.00	264.3	10.8	
WOCM	SELBYVILLE	DE 251 A	42.44	31.00	80.5	11.4	
WPEN	BURLINGTON	NJ 248 B	189.29	178.00	9.9	11.3	

LMS as of 6/16/2023

**EXHIBIT B Community Coverage, Salisbury, MD**

Proposed WKTT (FM) Community Coverage, Salisbury, MD (Licensed= dotted)

