

MINOR CHANGE APPLICATION
TAMA RADIO LICENSES
OF JACKSONVILLE, FL, INC.
WSJF (FM) RADIO STATION
CH 288C3 - 105.5 MHZ - 25.0 KW
ST. AUGUSTINE, FLORIDA
March 2006

EXHIBIT B

Radio Frequency Assessment

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. §1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997 ("Bulletin"), regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. This study considers all nearby contributing stations and utilizes the appropriate formulas contained in the OET Bulletin.⁵

The proposed WSJF five bay (full wavelength) antenna system will be mounted with its center of radiation 34.8 meters (114.1 feet) above the ground at the proposed tower location and operate with an effective radiated power of 25.0 kilowatts in the horizontal and vertical planes (circularly polarized). The WSJF antenna will be an Electronics Research, Inc., rototiller style system (FCC/EPA Type 3). At 2.0 meters, the height of an average person above the ground at the base of the tower, the WSJF antenna system will contribute 0.1172 mw/cm².⁶ Based on exposure limitations for controlled environments, 11.7% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 58.6% of the limit is reached at 2.0 meters above the ground at the base of the tower.

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- 5) The contributions of the FM facilities were calculated using the FM Model program. A single bay EPA dipole antenna was used for calculation purposes. In cases where the number of bays of the antenna was known, this data was used in the FMModel program.
- 6) This level of field occurs at 12.0 meters out from the base of the tower and is considered worst case.

The authorized W226AO antenna system will be mounted with its center of radiation 55.0 meters (180.0 feet) above the ground at the tower location and operate with an effective radiated power of 0.055 kilowatts in the horizontal plane. At 2.0 meters, the height of an average person above the ground at the base of the tower, the W226AO antenna system will contribute 0.0002 mw/cm^2 .⁷ Based on exposure limitations for controlled environments, <0.1% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 0.1% of the limit is reached at 2.0 meters above the ground at the base of the tower.

Combining the contributions of WSJF and W226AO, a total of 58.7% of the uncontrolled limit is reached at two meters above the ground at the base of the tower. Since this level is below the 100% limit defined by the Commission, the proposed WSJF facility is believed to be in compliance with the radio frequency radiation exposure limits as required by the Federal Communications Commission. Further, Tama will insure warning signs are posted in the vicinity of the tower warning of the potential radio frequency radiation hazards at the site. In addition, Tama will reduce the power of the proposed facility or cease operation, in cooperation and coordination with other tower users, as necessary, to protect persons having access to the site, tower or antenna from radio frequency radiation in excess of FCC guidelines.

7) This level of field occurs at 30.0 meters out from the base of the tower and is considered worst case.