

Compliance with Special Operating Conditions

The WJKB (FIN 91724) Construction Permit (File Number BPED-20190529AAK) contains several Special Operating Conditions summarized as follows:

1. THE AUTOMATIC PROGRAM TEST PROVISIONS OF 47 C.F.R. § 73.1620 DO NOT APPLY IN THIS CASE. A FORMAL REQUEST FOR PROGRAM TEST AUTHORITY MUST BE FILED WITH THE FCC FORM 302-FM, APPLICATION FOR LICENSE, BEFORE PROGRAM TESTS WILL BE AUTHORIZED. This request must contain documentation which demonstrates compliance with the following special operating condition:
2. The permittee/licensee must, upon completion of construction and during the equipment test period, make proper radiofrequency electromagnetic (RF) field strength measurements throughout the transmitter site area, including on the roof and inside all nearby buildings, to determine if there are any areas that exceed the FCC guidelines for human exposure to RF fields. Any areas, including on the roof or inside a building, found to exceed the recommended guidelines must be clearly marked with appropriate visual warning signs which describe the nature of the hazard. Furthermore, access to these areas must be restricted. If necessary, a fence must be erected at such distances and in such a manner as to prevent the exposure of humans to RF fields in excess of the FCC Guidelines (OET Bulletin No. 65, Edition 97-01, August 1997). The fence must be a type which will preclude casual or inadvertent access, and must include warning signs at appropriate intervals which describe the nature of the hazard. Any areas within the fence found to exceed the recommended guidelines must be clearly marked with appropriate visual warning signs.
3. The permittee/licensee must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
4. This is a Section 73.215 contour protection grant as requested by this applicant.

EMF complies with, or agrees to, these conditions as follows:

1. A formal request for program test authority is hereby submitted in this Form 302-FM License Application
2. RF Measurements have been done to determine the RF Fields in and around the immediate area of the tower and associated buildings. A report of these measurements is included in this exhibit.
3. EMF in coordination with other users of the site, agrees to reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
4. EMF requested and recognizes WJKB as a contour protection facility under Section 73.215

Environmental Effects

Educational Media Foundation (“EMF”) certifies that WJKB complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

On June 12, 2021, Tommy Presite, Engineer for Educational Media Foundation, used EMF’s “shaped probe” Narda RFR measurement equipment¹ to evaluate radiofrequency exposure compliance at the WJKB transmitter site. WJKB was operating at its fully permitted effective radiated power of 6kw while these tests were made.

Measurements were taken at the base of the tower and at various points around the tower compound, terrain and obstacles permitting. The probe was slowly swept between 1-2 meters above the ground, as well as approximately 1 meter side-to-side, seeking, and noting, the highest overall readings. The highest overall instantaneous peak reading found during these measurements was 12.53% of the controlled/occupational limit which is 62.65% of the uncontrolled/public exposure limits of OET-65. This peak reading was at a distance of 10.7 meters from the base of the WJKB tower and is seen on the measurement map plot. The meter was also set to do time averaging readings which resulted in a peak average of 7.9% of the controlled/occupational limit which is 39.5% of the uncontrolled/public exposure limits of OET-65.

These values are below the FCC limits for uncontrolled human exposure to RF fields. Therefore, no fencing or warning signs are required.

Based on this evaluation, WJKB fully complies with the FCC’s maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

¹ Instrument: Narda NBM-550, Serial Number A-0227, Calibration date 05/01/2020
Probe: Narda EA5091, Serial Number 01018 Calibration date 05/01/2020

