

Statement in Support of Engineering STA

This engineering application for Special Temporary Authority (STA) is the result of preparing a Form 2100, Schedule 381 Incentive Auction Certification for Class A TV Station WKME-CD, D15, Kissimmee, Florida. It was discovered that the station's of-record geographic coordinates, site elevation, center-of-radiation height AGL and AMSL were not as accurate as they should have been, and that a different transmitting antenna make and model, albeit one with a similar (but not identical) pattern, had been installed. An Engineering STA is therefore needed to cover the station's operation pending grant of an also submitted application for Construction Permit. This Engineering STA application therefore seeks to:

1. Correct the station coordinates from 28-21-31 N, 81-30-45 W, NAD27, to 28-21-38.1 N, 81-30-40.4 W, NAD27 (28-31-39.1 N, 81-30-39.7 W, NAD83), a shift of +7.1 seconds in latitude and +4.6 seconds in longitude. This is a more accurate determination of the geographic coordinates for the Marriott Orlando World Center, 8701 World Center Drive, Orlando, Florida; that is, the station was in fact constructed at the authorized address. However, because this is greater than ± 3 second change, it cannot be accomplished by a simple license modification pursuant to Section 73.1690(c)(11) of the FCC Rules, and application for construction permit is first required.
2. Correct the site elevation from 31 meters AMSL to 31.7 meters AMSL.
3. Correct the transmitting antenna center of radiation height from 96 meters AGL to 100.6 m AGL.
4. Correct the transmitting antenna make and model from a Scala 4DR-8S to an Antenna Concepts ACS2 DR. As shown by the attached Figure 1, the Antenna Concepts DR pattern is inside the Scala 8S pattern.

Grant of this application would not constitute a major environmental action. The proposed antenna is an existing antenna mounted on the roof of an existing multi-story hotel. The transmitting antenna is side-mounted on a tower bolted to the side of a rooftop equipment penthouse, extending the height of the penthouse by an allowable 20 feet (6.1 meters). FAA and FCC Antenna Structure Registration issues are therefore not required. No Section 1.1307 conditions triggering major environmental action status are believed to exist.

The proposed operation would comply with FCC guidelines governing human exposure to radio frequency energy. The maximum predicted ground-level radio frequency power density for the proposed operation is 0.1% of the 0.319 mW/cm^2 public exposure limit applying at TV Channel 15. Rooftop exposures for other than the penthouse roof are predicted to not exceed 8.5% of the 1.60 mW/cm^2 occupational limit applying at TV Channel 15 (the rooftop is not accessible to the public).



Class A Station WKME-CD • DTV Channel D15 • Kissimmee, Florida

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Operation should be suspended if access to the penthouse roof is needed, since the transmitting antenna is only 3.0 meters above the penthouse roof.

When studied on an OET-69 basis using 1 km x 1 km cells and 1 point/km of terrain extraction, the proposed operation, based on the corrected coordinates, corrected height, and revised directional antenna pattern, is not predicted to cause greater than 0.5% incremental interference to any full-service TV station or Class A station, nor greater than 2% incremental interference to any LPTV or TV Translator station. Processing on that basis is requested. It is noted that Station WFLA-TV, D07 (V08), Tampa, Florida, has a pending rulemaking petition to move to Channel 14 (FCC File Number BPRM-20110535AFC). The Commission's TV_Process software appears to have difficulty in calculating the incremental change in interference to a rulemaking, as opposed to the absolute interference. The TV_Process software reports an impermissible interference of 3.67% for the now proposed WKME-CD adjacent-channel operation using the Stringent emission mask. However, this is absolute interference, not incremental interference. Running the TV_Process software for the of-record WKME-CD facilities gives 3.76% predicted interference, meaning that the more directional Antenna Concepts pattern more than offsets the coordinate correction and slight increase in height; that is, the proposed operation *decreases* the predicted interference to WFLA-TV as D14, by -0.09%. The proposed operation is therefore not mutually exclusive with BPRM-20110535AFC.

The proposed site is 315 km from the Miami Land Mobile Channel 14 reference coordinates, well in excess of the required 95 km. The proposed site is 1,482 km from the Mexican border, and 1,567 km from the Canadian border. Therefore, no Mexican or Canadian coordination issues apply. The closest FCC Monitor Station is Vero Beach, Florida, at 120 km distant and therefore not a conflict.



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**Licensed Scala 4DR-8S vs. As-Built Antenna Concepts ACS2 DR
Azimuth Patterns**

