

R. M. SMITH ASSOCIATES
BROADCAST TECHNICAL CONSULTANTS
4267 NW FEDERAL HIGHWAY #120 - JENSEN BEACH, FL 34957
(772) 335-0688 FAX (772) 335-1438
E-MAIL Rmsradio@adelphia.net

**APPLICATION FOR CONSTRUCTION PERMIT
NEW(FM) – 253A
SATELLITE BEACH, FL**

EXHIBIT 30

RF EXPOSURE LEVELS

The proposed NEW(FM) antenna is a three bay Shively 6813-3, full wavelength spaced with a center of radiation at 98 meters AGL. The antenna is circularly polarized with an ERP of 6.0 kW in both horizontal and vertical polarization.

The antenna for WAOA(FM), 296C1, Melbourne, FL (F.C.C. File No. BLH-19900314KD) is located at the same site with a center of radiation at 144 meters AGL. The WAOA(FM) antenna is a 6 bay full-wave spaced design. The antenna is circularly polarized with an ERP of 100.0 kW in both horizontal and vertical polarization.

The antenna for WCIF(FM), 292C3, Melbourne, FL (F.C.C. File No. BLH-19990210KA) is located at the same site with a center of radiation at 132 meters AGL. The WCIF(FM) antenna is a 4 bay full-wave spaced design. The antenna is circularly polarized with an ERP of 13.5 kW in both horizontal and vertical polarization.

The antenna for WBVD(FM), 236A, Melbourne, FL (F.C.C. File No. BLH-20050920AEK) is located at the same site with a center of radiation at 116 meters AGL. The WBVD(FM) antenna is a 4 bay half-wave spaced design. The antenna is circularly polarized with an ERP of 4.3 kW in both horizontal and vertical polarization.

The antenna for FM translator W227AF, 227D, Melbourne, FL (F.C.C. File No. BLFT-19960409TA) is located at the same site with a center of radiation at 55 meters AGL. The W227AF antenna is a 1 bay vertical polarized system with an ERP of 0.055 kW.

No other broadcast or high power transmitting facilities are located at the site.

METHOD

The operating parameters for each of the facilities at the site were entered into the F.C.C. OET FMMODEL computer model. The predicted RF field from the two facilities was summed. This direct summation represents the “worst-case” prediction of field intensity.

RESULTS

The RF field, at two meters above ground, from the operation of the NEW(FM) facility reaches a maximum of $4.1 \mu\text{W}/\text{cm}^2$ at a distance of 50 meters from the base of the tower.

The RF field, at two meters above ground, from the operation of the WAOA(FM) facility reaches a maximum of $16.9 \mu\text{W}/\text{cm}^2$ at a distance of 49 meters from the base of the tower.

The RF field, at two meters above ground, from the operation of the WCIF(FM) facility reaches a maximum of $7.1 \mu\text{W}/\text{cm}^2$ at a distance of 51 meters from the base of the tower.

The RF field, at two meters above ground, from the operation of the WBVD(FM) facility reaches a maximum of $0.55 \mu\text{W}/\text{cm}^2$ at a distance of 444 meters from the base of the tower.

The RF field, at two meters above ground, from the operation of the W227AF facility reaches a maximum of $0.15 \mu\text{W}/\text{cm}^2$ at a distance of 55 meters from the base of the tower.

The sum of the three fields is at most $28.2 \mu\text{W}/\text{cm}^2$. This field is less than 15% of the General Population maximum field density of $200 \mu\text{W}/\text{cm}^2$.

The licensee is aware that fields in excess of the Guidelines exist on the tower in the vicinity of the antenna. The tower is fenced to prevent unauthorized access. The licensee will continue, in cooperation with other users at the site, to prevent exposure in excess of the Guidelines by reduction of power or cessation of operation while maintenance workers are present on the tower.