

# EXHIBIT 17-A

## Human Exposure to Radiofrequency Electromagnetic Field & Section 106 Compliance (Environmental)

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, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. Fred H. Baker, Jr., licensee of FM translator K224AP seeks to modify the license of K224AP (Facility ID# 22412), licensed to Fort Smith, Arkansas, by changing the frequency to Channel 226D (93.1 MHz) to serve Fort Smith, Arkansas by operating with an effective radiated power of 250 watts non-directional. The transmitting site will be an existing tower 147.2 meter (482.8 ft.) overall height with ASR Registration #1040841. The tower is located at 35° 21' 15.5" N ~ 94° 25' 53.3" W (NAD 27). The proposed antenna is a side mounted Shively 6832-4-SS(0.5)-BB 6 bay half wave broadband antenna with a center of radiation of 143 meters AGL. K224AP will operate with 250 watts ERP at 165.2 meters HAAT. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of § 1.1306 of the FCC Rules. Because K224AP proposes to operate from an existing tower, is exempt from a Section 106 review by the SHPO/THPO.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 0.008  $\mu\text{W}/\text{cm}$  at 246 meters, which is 0.004 percent of the general population/uncontrolled maximum permitted exposure limit. Fred H. Baker, Jr., also has construction permits for FM translators K232BX and K269AL and a pending application for K285CN to operate from the same broadband transmit antenna. The combined maximum calculated signal density near the tower at two meters above ground level attributable to the combined output of the K224AP, K269AL, K285CN and K232BX facilities is 0.0312  $\mu\text{W}/\text{cm}$  at 246 meters, which is 0.015 percent of the general population/uncontrolled maximum permitted exposure limit.

The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.