

MINOR CHANGE APPLICATION
RICHARD BROOKS
W282AH FM TRANSLATOR STATION
CH 267D - 101.3 MHZ - 0.25 KW
HORSEHEADS, NEW YORK
July 2016

EXHIBIT D

Radio Frequency Assessment

Brooks, licensee of FM translator station W282AH, is in the process of making changes to the operation of W284AH. The proposed W284AH facility will be co-located with WNKI (FM) on a relatively short tower; therefore, it was not possible to certify compliance using the RF worksheets.

The proposed W284AH antenna will be mounted with its center of radiation 50 meters (164.0 feet) above the ground at the tower location and will operate with an effective radiated power of 0.25 kilowatt in the vertical and horizontal planes (circularly polarized). At 2.0 meters above the ground at the base on the tower, the W284AH antenna will contribute 0.0044 mw/cm².¹ Based on exposure limitations for a controlled environment, 0.4% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 2.2% of the ANSI limit is reached at 2.0 meters above the ground at the tower base.

The authorized WNKI antenna is mounted with its center of radiation 56 meters (183.7 feet) above the ground at the tower location and operates with an effective radiated power of

1) This level of signal is delivered 13.0 meters from the base of the tower and is considered a worst case scenario.

40.0 kilowatts in the vertical and horizontal planes (circularly polarized). At 2.0 meters above the ground at the base on the tower, the WNKI antenna contributes 0.0745 mw/cm^2 .² Based on exposure limitations for a controlled environment, 7.4% of the allowable limit is reached at 2.0 meters above the ground at the base of the tower. For uncontrolled environments, 37.3% of the ANSI limit is reached at 2.0 meters above the ground at the tower base.

Combining the contributions of the proposed W284AH and WNKI, a total of less than 40% of the limit for uncontrolled environments is reached at 2.0 meters above the ground at the fence perimeter at the base of the tower. Since this contribution level is less than the ANSI limits, it is believed the proposed W284AH facility is in compliance with the radio frequency radiation exposure limits, as required by the Federal Communications Commission. Brooks will also insure that warning signs have been posted in the vicinity of the tower warning of potential radio frequency radiation hazards at the site. In addition, Brooks will reduce the power of the 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.

2) This level of signal is delivered 40.0 meters from the base of the tower and is considered a worst case scenario.