

Engineering Exhibit
WFKS(FM), Melbourne, FL
Channel 236A - FID 11409
Application for Modification of Auxiliary Antenna License
BXMLH-2006092AKL

INTRODUCTION

The purpose of this application is to modify the Auxiliary Antenna License of WFKS(FM) following the replacement of a non-directional antenna and to make minor corrections to the licensed geographical coordinates. WFKS(FM) and WLRQ-FM (FAC. ID# 20372) are sharing the auxiliary antenna as specified in WLRQ-FM Auxiliary Antenna Construction Permit BXPB-20130807ABR. Only one Station will use the facility at a time. Following installation of the replacement antenna, an application on FCC Form 302 was filed notifying of AM station WMMB's return to the direct method of power determination, File # BZ-20160822ABR.

GEOGRAPHICAL COORDINATES AND ANTENNA HEIGHT DATA

The WFKS(FM) auxiliary antenna is mounted on a tower identified by ASR number 1030590 but the WFKS(FM) licensed coordinates differ slightly from those specified on the ASR. There is no change to the "Height of radiation center above ground" or the "Height of radiation center above average terrain". A tabulation of the presently licensed and proposed coordinates and heights are as follows:

	Licensed	Proposed
Antenna Coordinates (NAD27)		
North Latitude:	28° 04' 41"	28° 04' 42"
West Longitude:	80° 35' 57"	80° 35' 56"
Height of radiation center above ground (Meters):	67	67
Height of radiation center above mean sea level (Meters):	67	69
Height of radiation center above average terrain (Meters):	64	64
Overall height of antenna structure above ground:		71

These minor corrections will bring the WFKS(FM) auxiliary antenna license in full compliance with the ASR.

RF RADIATION COMPLIANCE

Radio Frequency Radiation Study and Statement

The Proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65 "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation".

The proposed antenna system is an EPA type 3, 3-bay, full-wave spaced "Rototiller" antenna mounted with its center of radiation 67 meters above ground level, and operates with an effective radiated power of 1.2 Kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 33 meters from the base of the tower, this proposal will contribute worst case, 1.99 microwatts per square centimeter, or 0.20 percent of the allowable ANSI limit for controlled exposure, and 1.0 percent of the allowable limit for uncontrolled exposure. It is therefore believed that this proposal is in compliance with OET Bulletin No. 65 as required by the Federal communications Commission.

Further, signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operations, 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.

