

EXHIBIT 12**INTERFERENCE STUDY ON CHANNEL 279**

The Cedarville University
Greenville, OH

Page 1 OF 2

This exhibit provides data to demonstrate compliance with 47 C.F.R. 74.1204, in respect to the applicant's proposal for a NEW FM Translator in Greenville, Ohio. Provided is a Channel Study and a Contour Study calculated at 100 meters AAT @ .100 kilowatts for comparative purposes, and a comparison statement using Exhibit 11 to demonstrate compliance.

MAPFM search of channel 279D (103.7 MHz), at N. 40 4 17, W. 84 37 51.

Searching Channel 279D (103.7 MHz):

<u>CALL</u>	<u>CITY</u>	<u>ST</u>	<u>CHN</u>	<u>CL</u>	<u>S</u>	<u>DIST</u>	<u>SEPN</u>	<u>BRNG</u>	<u>CLEARANCE</u>
WGTZ	Eaton	OH	225	B	L	32.5	0.0	143.5ø	32.5
WRZX	Indianapolis	IN	277	B	L	135.5	55.8	261.7ø	79.7
WDEQFM	De Graff	OH	277	D	L	66.4	11.0	66.1ø	55.4
WMLX	St. Marys	OH	277	A	L	72.1	32.1	29.9ø	40.0
WGRR	Hamilton	OH	278	B	L	97.2	67.0	174.5ø	30.2
WRBI	Batesville	IN	280	A	L	108.5	37.9	209.7ø	70.6
WXEG	Beavercreek	OH	280	A	C	55.0	43.6	132.5ø	11.4
WXEG	Beavercreek	OH	280	A	L	55.0	39.2	132.5ø	15.8
WLBCFM	Muncie	IN	281	B	L	64.5	30.5	278.9ø	34.0
WLBCFM	Muncie	IN	281	B	L	64.5	51.5	278.8ø	13.0
WNLT	Harrison	OH	282	A	L	92.8	27.6	190.9ø	65.2
WNLT	Harrison	OH	282	A	C	94.1	30.9	184.5ø	63.3

The proposed is calculated at 100 watts & 100 meters AAT using the above site data and prevailing co-channel and adjacent channel standards. The Proposed creates a 60 dBu ((50/50) contour as predicted in chart below.

<u>øT</u>	<u>Height</u>	<u>HAAT</u>	<u>F(50,50)</u>	<u>60 dBu</u>
0ø	309.7	112.3	7.1 mi.	11.4 km.
30ø	310.4	111.6	7.1 mi.	11.4 km.
60ø	311.7	110.3	7.0 mi.	11.3 km.
90ø	309.1	112.9	7.1 mi.	11.5 km.
120ø	317.7	104.3	6.8 mi.	10.9 km.
150ø	316.7	105.4	6.8 mi.	11.0 km.
180ø	333.0	89.1	6.2 mi.	9.9 km.
210ø	337.1	84.9	6.0 mi.	9.6 km.
240ø	341.9	80.1	5.8 mi.	9.3 km.
270ø	332.5	89.5	6.2 mi.	9.9 km.
300ø	324.2	97.8	6.5 mi.	10.5 km.
330ø	320.3	101.7	6.7 mi.	10.7 km.

Terrain averaging study with HAAT in meters at N. 40 4 17, W. 84 37 51.

Average terrain height: 1056.5 feet, or 322.0 meters.

HAAT, based on 12 radials, with an Antenna radiation center equal to 1384.5 feet, or 422.0 meters AMSL, is 328.1 feet, or 100.0 meters.

By comparison---

The proposed NEW FM Translator will operate at 0.050 kilowatts at 63 meters AAT. **Exhibit 11** of the instant proposal provides calculated data demonstrating contours less than those used in the above Interference Study.

A Effective Radiated Power and Radiation Center Above Average Terrain, less than the interference standards will allow, has been chosen in order that this proposal for a NEW FM translator will be in compliance with C.F.R 47, Para. 74.1235 (b) (1) .

Thereby, no interference will be caused by the proposed NEW FM translator and compliance with 47 C.F.R. 74.1204 is supported.