

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRI-STATE CHRISTIAN TV, INC., licensee of digital television station WINM-DT, Channel 12 in Angola, Indiana, in support of its Application for Construction Permit to specify a new transmitter site and an increase in effective radiated power.

It is proposed to mount a new Alive ATC-BCE04M-V3-12 directional antenna at the 178-meter level of an existing 228-meter tower and reorient the antenna pattern to the northeast. Exhibit B is a map upon which the predicted service contours of proposed WINM-DT are plotted. As shown, the entire community of license, Angola, Indiana, is encompassed by the proposed 43 dBu city-grade service contour.

Azimuth and elevation pattern data for the Alive directional antenna are included in Exhibit C. Exhibit D contains the summary results from a TVStudy interference study, which was conducted using a cell size of 1.0 kilometers and increment spacing of 0.5 kilometer. It concludes that the proposed WINM-DT facility meets the Commission's de minimis interference criteria to all co-channel and adjacent-channel post-repack full-power and Class A television facilities.

A detailed power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the existing tower is proposed herein, the Federal Aviation Administration has not been notified of this application. It is important to note that the Federal Communications Commission has assigned Antenna Structure Registration Number 1030891 to this structure.

EXHIBIT A

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read "K. T. Fisher", with a stylized, elongated final letter.

KEVIN T. FISHER

September 7, 2022

CONTOUR POPULATION (2020 U.S. CENSUS DATA)
CITY-GRADE (43 DBU) : 965,310 (416,652 HH)
NOISE-LIMITED (36 DBU) : 1,239,928 (531,087 HH)

SMITH AND FISHER, LLC

**PROPOSED 36 DBU
FCC CONTOUR**

**WINM-DT
CITY OF LICENSE**

**PROPOSED 43 DBU
FCC CONTOUR**

Fort Wayne

Proposed Site

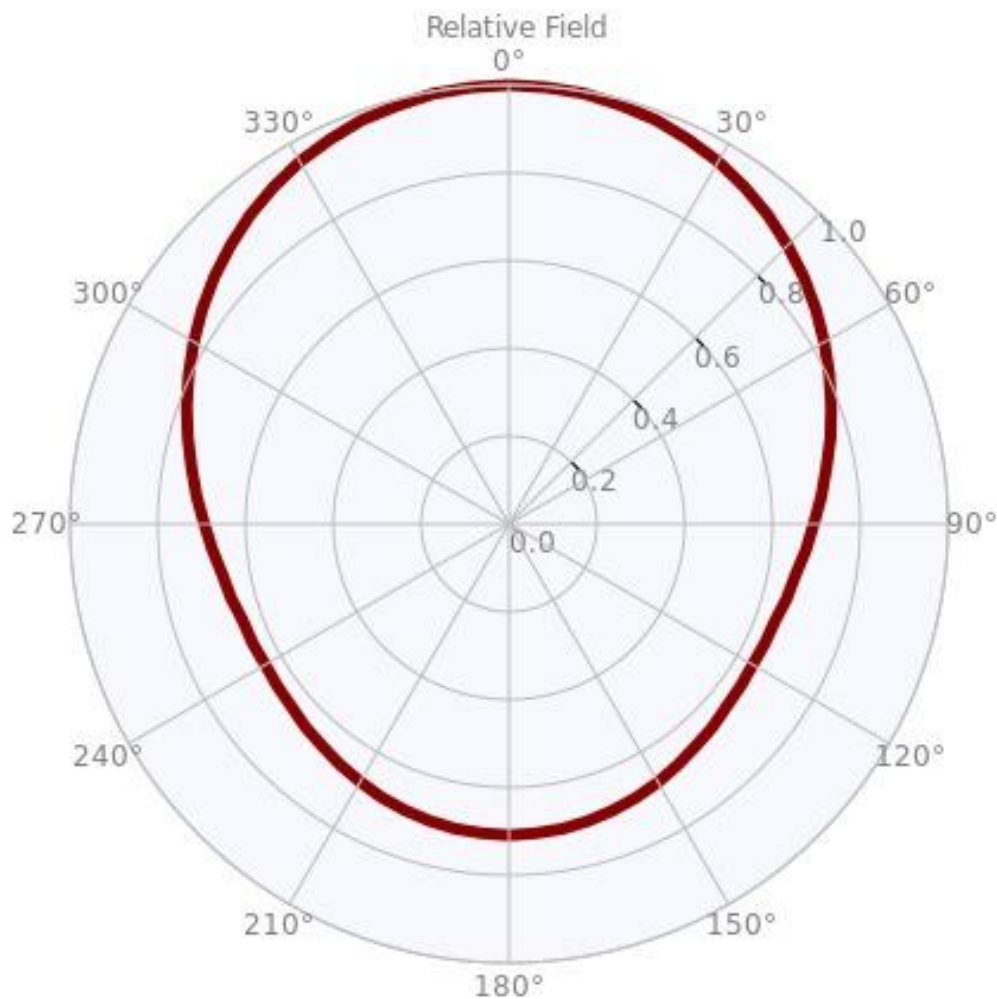
Scale 1:1,000,000

0 10 20 30 km

EXHIBIT B
PREDICTED SERVICE CONTOURS
PROPOSED WINM-DT
CHANNEL 12 - FORT WAYNE, INDIANA

Horizontal Azimuth Pattern

[EXHIBIT C](#)





ANTENNA SPECIFICATIONS



SPEC GENERATOR

model no.: ATC-BCE04M-V3-12

call sign: WINM

city of license: Angola

state: IN

Elevation pattern -5 to 90

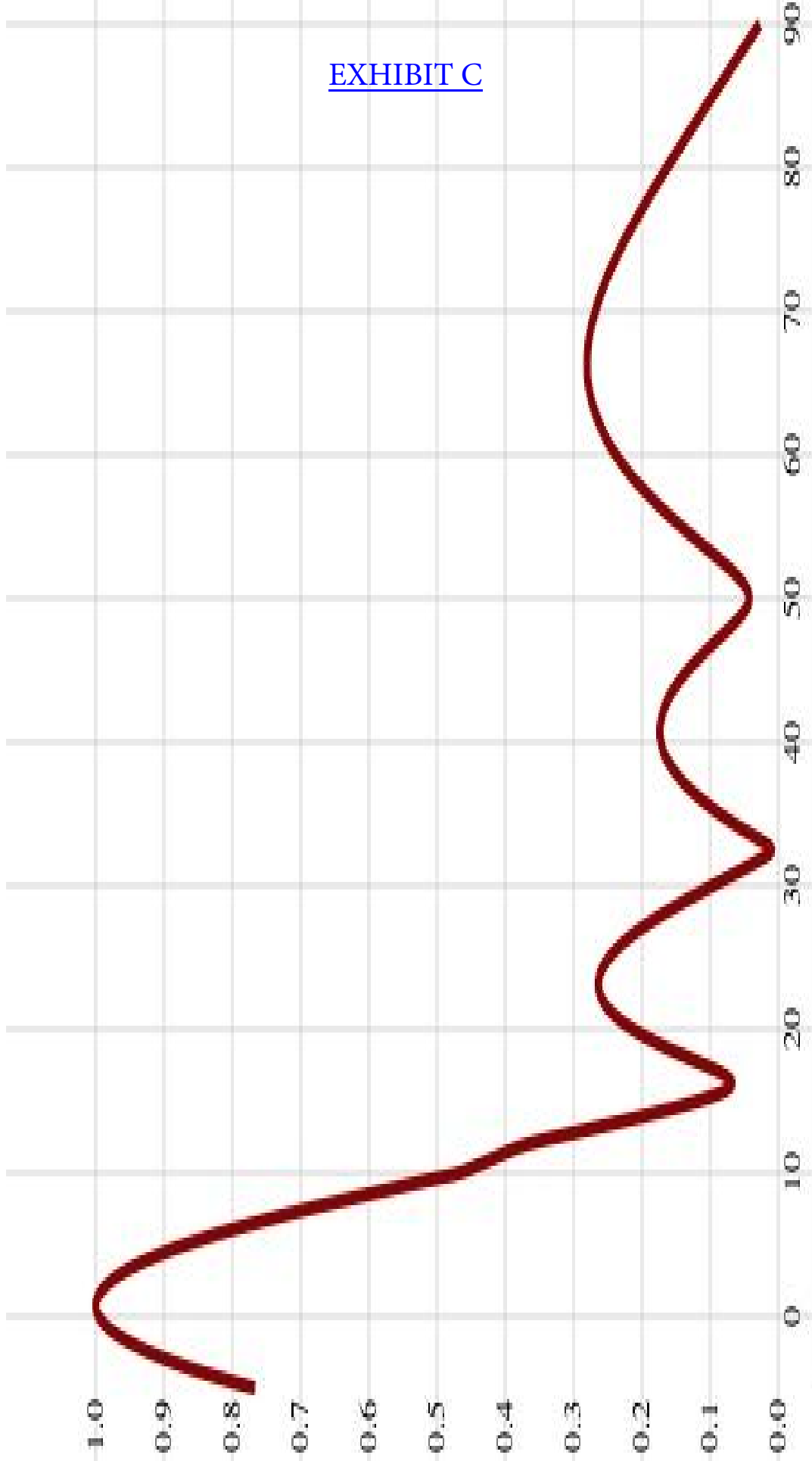


EXHIBIT C

Azimuth Pattern Tabulation, FCC

EXHIBIT C

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0°	1.000	0.00	90°	0.694	-3.17	180°	0.709	-2.99	270°	0.694	-3.17
10°	0.995	-0.04	100°	0.663	-3.57	190°	0.705	-3.04	280°	0.734	-2.69
20°	0.979	-0.18	110°	0.645	-3.81	200°	0.694	-3.17	290°	0.781	-2.15
30°	0.953	-0.42	120°	0.641	-3.86	210°	0.678	-3.38	300°	0.829	-1.63
40°	0.918	-0.74	130°	0.647	-3.78	220°	0.661	-3.60	310°	0.876	-1.15
50°	0.876	-1.15	140°	0.661	-3.60	230°	0.647	-3.78	320°	0.918	-0.74
60°	0.829	-1.63	150°	0.679	-3.36	240°	0.641	-3.86	330°	0.953	-0.42
70°	0.781	-2.15	160°	0.694	-3.17	250°	0.645	-3.81	340°	0.979	-0.18
80°	0.734	-2.69	170°	0.705	-3.04	260°	0.663	-3.57	350°	0.995	-0.04

TVSTUDY INTERFERENCE ANALYSIS RESULTS
PROPOSED WINM-DT
CHANNEL 12 – ANGOLA, INDIANA

Study created: 2022.09.06 16:21:47

Study build station data: LMS TV 2022-08-28

Proposal: WINM D12 DT LIC ANGOLA, IN

File number: BLCDT20130711ABN

Facility ID: 67787

Station data: User record

Record ID: 22

Country: U.S.

Zone: I

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	143.7 km
No	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	214.3
Yes	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	163.8
Yes	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	221.0
No	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	413.6
Yes	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	254.1
Yes	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	228.5
Yes	WMFD-TV	D12	DT	LIC	MANSFIELD, OH	BLCDT20081112ALJ	219.3
No	WLUK-TV	D12	DT	LIC	GREEN BAY, WI	BLANK0000162836	432.6
No	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	459.5
No	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	155.1
No	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	155.1
No	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	252.3
Yes	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	161.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D12

Latitude: 41 6 13.00 N (NAD83)

Longitude: 85 11 28.00 W

Height AMSL: 426.0 m

HAAT: 178.0 m

Peak ERP: 22.0 kW

Antenna: Alive ATC-BCE04M-V3-12 355.0 deg

Elev Pattn: Generic

Elec Tilt: 1.00

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	16.0 kW	167.2 m	87.2 km
45.0	21.8	179.0	90.2
90.0	19.3	188.6	90.2
135.0	11.9	185.5	86.5
180.0	9.12	188.1	84.9
225.0	10.9	178.8	85.4
270.0	9.86	166.8	83.8
315.0	9.67	167.2	83.7

**Proposal is within coordination distance of Canadian border

Distance to Canadian border: 195.8 km

Distance to Mexican border: 1928.4 km

Conditions at FCC monitoring station: Allegan MI

Bearing: 339.5 degrees Distance: 178.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 273.0 degrees Distance: 1689.6 km

Study cell size: 1.00 km

Profile point spacing: 0.50 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

No IX check failures found.

POWER DENSITY CALCULATION

PROPOSED WINM-DT
CHANNEL 12 – ANGOLA, INDIANA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Angola facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 22.0 kW (H) and 11 kW (V), an antenna radiation center 178 meters above ground, and the specific elevation pattern for the proposed Alive ATC-BCE04M-V3-12 antenna, maximum power density two meters above ground of 0.00023 mW/cm² is calculated to occur approximately 75 meters northeast of the base of the tower. Since this is only 0.1 percent of the 0.20 mW/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 12 (204-210 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.