

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of CLARION BROADCASTING GROUP, INC., licensee of low power digital television station K17JN-D, Channel 17 in Enid, Oklahoma, in support of its amendment to its Application for Construction Permit 0000030100, which specifies operation from a new site and an increase in coverage. The purpose of this amendment is to specify a full-service emission mask. No change in site location, effective radiated power, antenna make/model or antenna height is proposed herein.

It is proposed to mount an ERI directional antenna at the 90-meter level of an existing 142-meter tower. The proposed effective radiated power for the facility is 15.0 kW in the horizontal plane. Exhibit B is a map upon which the predicted 51 dBu service contour is plotted.

Elevation and azimuth pattern data for the proposed ERI 8-bay antenna appear in Exhibit C. Exhibit D contains the summary results from a TVStudy interference study, which was conducted using a cell size and increment spacing of 1.0 kilometer. It concludes that the proposed K17JN-D facility with the full-service emission mask meets the Commission's *de minimis* interference criteria to all co-channel and adjacent-channel post-repack full-power and Class A and LPTV/translator facilities. A detailed power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the existing WIWU-DT tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, the Federal Communications Commission issued Antenna Structure Registration Number 1011491 to this tower.

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". The signature is stylized with a large "K", a dot after "T", and a long horizontal stroke at the end.

KEVIN T. FISHER

October 31, 2017

CONTOUR POPULATION  
2015 U.S. CENSUS DATA  
69,487 (29,113 HH)



FCC 51 DBU  
SERVICE CONTOUR

K17JN-D

EXHIBIT B  
PREDICTED SERVICE CONTOUR  
PROPOSED K17JN-D  
CHANNEL 17 - ENID, OKLAHOMA

Scale 1:400,000



**AZIMUTH PATTERN**

Type: AL-M

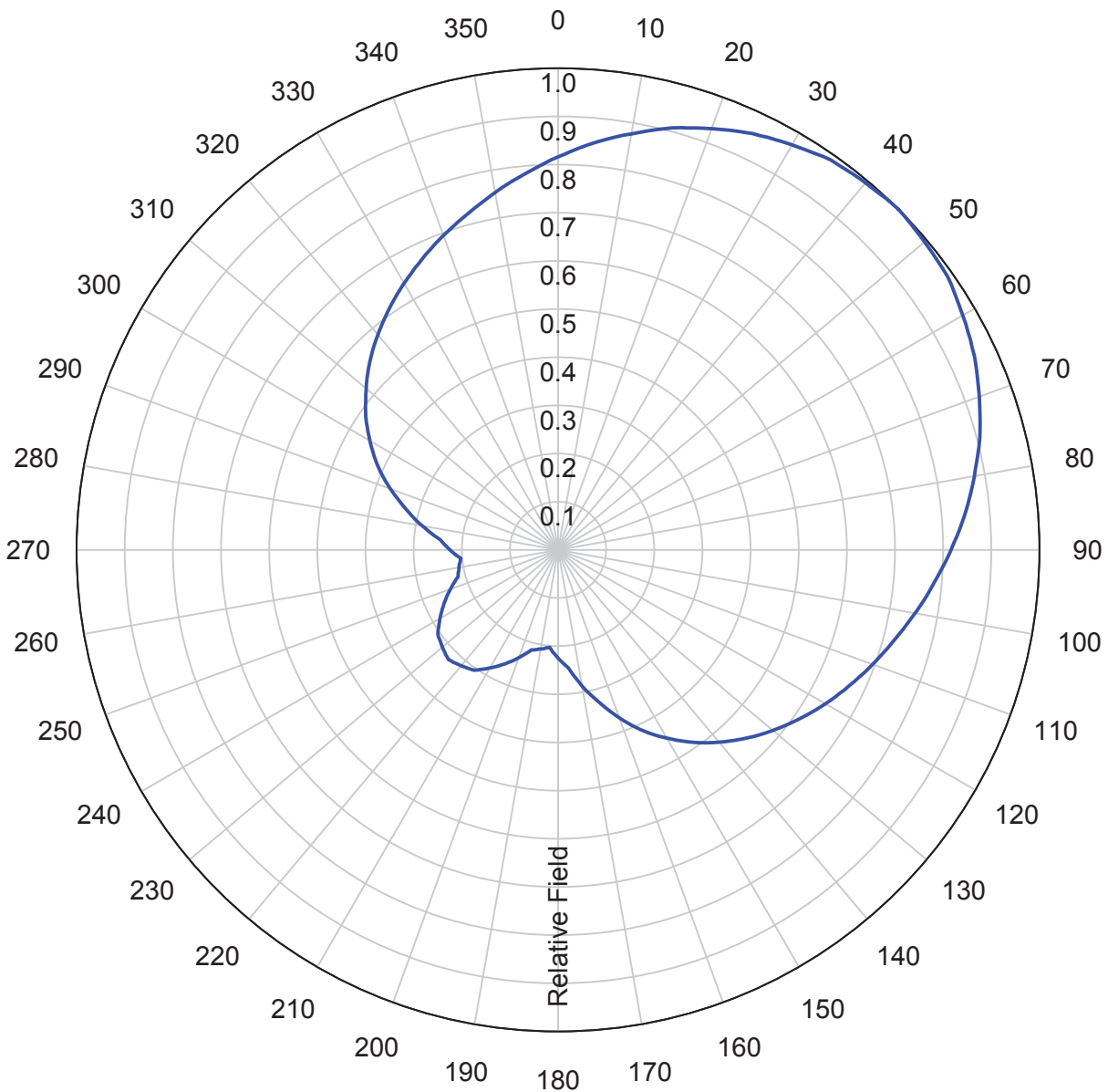
	Numeric	dBd
Directivity:	<u>2.55</u>	<u>4.07</u>
Peak(s) at:		

Channel: 17

Location: \_\_\_\_\_

Polarization: Horizontal

Note: Pattern shape and directivity may vary with channel and mouting configuration.



Preliminary, subject to final design and review.

## **TABULATED DATA FOR AZIMUTH PATTERN FCC FILING FORMAT**

Type: *AL-M*

Polarization *Horizontal*

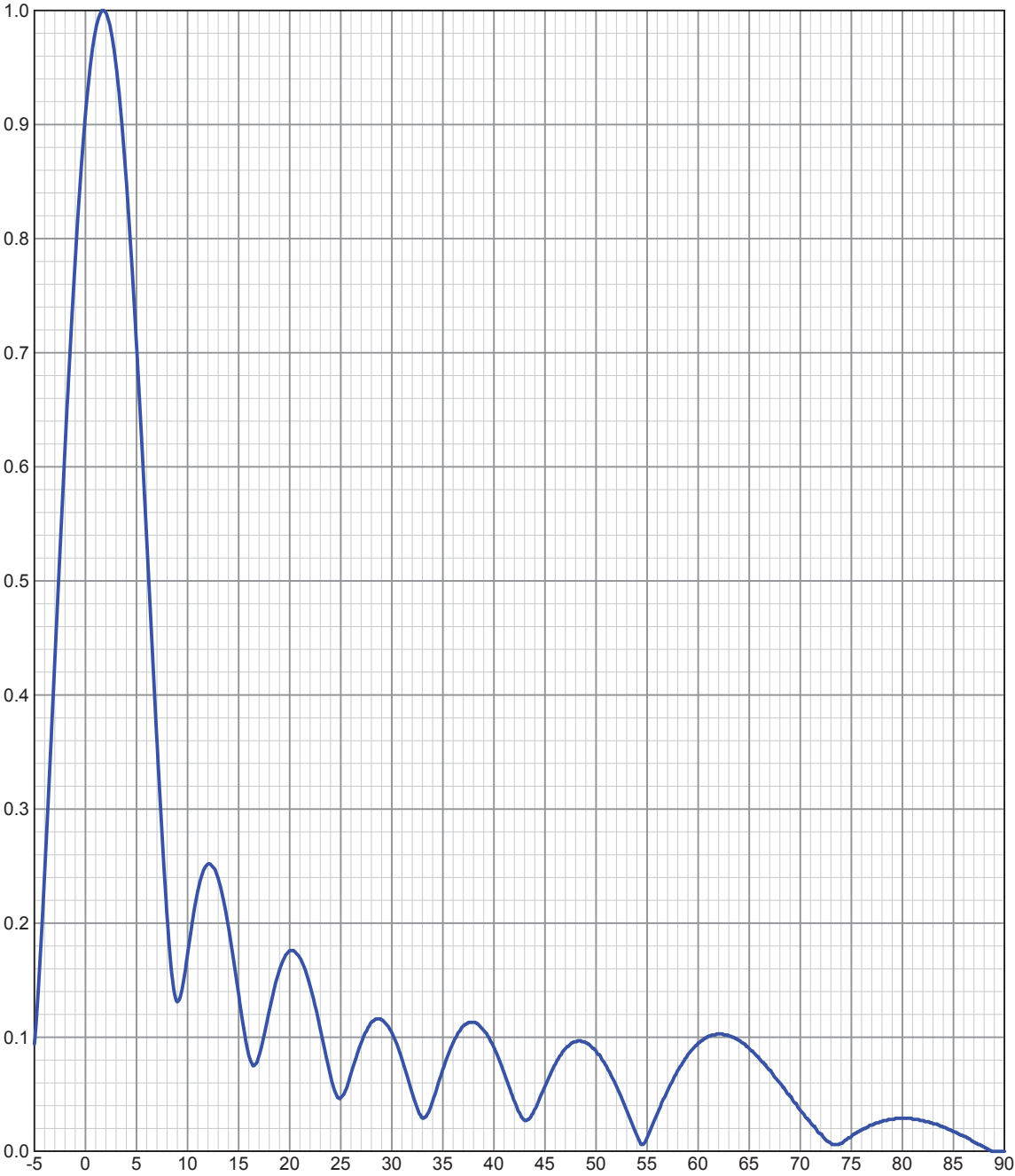
<b>ANGLE</b>	<b>FIELD</b>	<b>ERP (kW)</b>	<b>ERP (dBk)</b>
0	0.816	10.637	10.268
10	0.877	12.287	10.894
20	0.931	13.846	11.413
30	0.971	15.062	11.779
40	0.994	15.784	11.982
50	0.994	15.784	11.982
60	0.971	15.062	11.779
70	0.931	13.846	11.413
80	0.878	12.315	10.904
90	0.816	10.637	10.268
100	0.753	9.058	9.570
110	0.695	7.716	8.874
120	0.640	6.543	8.158
130	0.583	5.430	7.348
140	0.521	4.336	6.371
150	0.451	3.249	5.118
160	0.371	2.199	3.422
170	0.287	1.316	1.192
180	0.225	0.809	-0.922
190	0.209	0.698	-1.563
200	0.238	0.905	-0.434
210	0.283	1.279	1.070
220	0.314	1.575	1.973
230	0.314	1.575	1.973
240	0.283	1.279	1.070
250	0.238	0.905	-0.434
260	0.209	0.698	-1.563
270	0.225	0.809	-0.922
280	0.286	1.307	1.162
290	0.370	2.187	3.398
300	0.451	3.249	5.118
310	0.520	4.320	6.354
320	0.582	5.411	7.333
330	0.639	6.523	8.144
340	0.695	7.716	8.874
350	0.753	9.058	9.570

*Preliminary, subject to final design and review.*

ELEVATION PATTERN

Type:	AL8		Channel:	17
Directivity:	Numeric	dBd	Location:	
Main Lobe:	8.68	9.39	Beam Tilt:	1.75
Horizontal:	7.17	8.56	Polarization:	Horizontal

Relative Field



Preliminary, subject to final design and review.

TVSTUDY INTERFERENCE ANALYSIS RESULTS  
PROPOSED K17JN-D  
CHANNEL 17 – ENID, OKLAHOMA

Study created: 2017.10.28 14:58:23

Study build station data: LMS TV 2017-10-24 (1)

Proposal: K17JN-D D17 LD APP ENID, OK  
File number: BLANK0000030100  
Facility ID: 181675  
Station data: User record  
Record ID: 5  
Country: U.S.

Build options:  
Protect records not on baseline channel

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
KTEN	D17	DT	CP	ADA, OK	BLANK0000027669	262.4 km
KDOR-TV	D17	DT	LIC	BARTLESVILLE, OK	BLCDT20140331AHG	199.5
K17ID-D	D17	LD	LIC	CHEROKEE & ALVA, OK	BLDTT20101007ABF	65.3
KOPX-TV	D18	DT	CP	OKLAHOMA CITY, OK	BLANK0000026989	101.0

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D17  
Mask: Full Service  
Latitude: 36 24 28.40 N (NAD83)  
Longitude: 97 59 55.50 W  
Height AMSL: 480.7 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: AND-AL8M 45.0 deg  
Elev Pattn: Generic

49.0 dBu contour:

Azimuth	ERP	HAAT	Distance
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0.0 deg	9.99 kW	72.0 m	39.1 km
45.0	15.0	80.5	42.4
90.0	9.99	95.4	42.4
135.0	4.59	97.6	38.8
180.0	0.756	119.3	31.7
225.0	1.56	108.4	34.5
270.0	0.756	90.0	28.7
315.0	4.59	78.1	36.2

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m    Computed HAAT: 93 m

Distance to Canadian border: 1388.8 km

Distance to Mexican border: 802.7 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 355.9 degrees    Distance: 503.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 305.4 degrees    Distance: 753.1 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

Study cell size: 1.00 km  
Profile point spacing: 1.00 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 K17JN-D  
CHANNEL 17 – ENID, OKLAHOMA

[MODIFICATION OF CONSTRUCTION PERMIT 0000030100]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Enid facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW, an antenna radiation center 90 meters above ground, and the specific elevation pattern of the proposed ERI antenna, maximum power density two meters above ground of  $0.00061 \text{ mW/cm}^2$  is calculated to occur 47 meters northeast of the base of the tower. Since this is only 0.2 percent of the  $0.33 \text{ mW/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 17 (488-454 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.