

Non-Interference Compliance

Regarding Facility id 83195

Channel 261

Description of Exhibit 12 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

Page 3 contains a tabulation of the vertical radiation pattern of the proposed antenna and the minimum ground clearance of the interfering contour based on this pattern.

Page 4 includes a tabulation of the vertical radiation pattern for the proposed antenna provided by the antenna manufacturer.

Page 5 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 6 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 7 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

Note: The USGS Quadrangle and aerial photo show the presence of buildings within the zone of predicted interference. The highest structure in this zone is the press box associated with the football stadium and is 75ft (23m) tall. This proposal provides 31.4m (103 ft.) of ground clearance and is more than adequate to clear the press box and other buildings, so a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
1239753	BLH20080324AAX	KATT-FM	96.1	95.2
1247382	BMPH20070119AHJ	KZLS	66.4	66.4
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				66.4

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **66.4 dBμ**, this makes the proposed translator's worst-case interfering contour **106.4 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **322 m** from the transmit antenna.

The maximum horizontal plane of the interfering contour was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 6 of this exhibit). However, the field strength of the proposed translator's antenna varies with angle of depression from horizontal. The antenna relative fields are tabulated on the following page at 5 degree increments, starting at 5 degrees below horizontal. Antenna relative field strength data was provided and certified by the manufacturer of the proposed antenna. Using a free-space calculation that neglects any loss due to reflection, the vertical ground clearance of the proposed translator's interference contour has been tabulated. As shown on the following page, the area of interference clears the tower ground level (TGL) by **31.4 m** at the lowest point. The applicant has taken into account USGS quadrangles and relevant aerial photography in stating that no structures, except possibly tower support structures, puncture the area of interference. Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Note: The USGS Quadrangle and aerial photo show the presence of buildings within the zone of predicted interference. The highest structure in this zone is the press box associated with the football stadium and is 75ft (23m) tall. This proposal provides 31.4m (103 ft.) of ground clearance and is more than adequate to clear the press box and other buildings, so a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer:	PSI
Antenna Model:	FML-2(.75)
CORAGL:	103 m
Maximum ERP:	0.092 kW
Interfering Contour:	106.4 dBμ
Max Int. Contour Distance:	322 m
Min Ground Clearance:	31.4 m

Depression Angle Below Horizontal	Antenna Relative Field	ERP (watts)	Distance to Interfering Contour from Antenna (m)	Horizontal Distance of Interfering Contour from Tower (m)	Vertical Clearance of Interfering Contour above TGL (m)
5	.975	87.5	314.0	312.8	75.6
10	.903	75.0	290.8	286.4	52.5
15	.792	57.7	255.0	246.4	37.0
20	.650	38.9	209.3	196.7	31.4
25	.493	22.4	158.8	143.9	35.9
30	.331	10.1	106.6	92.3	49.7
35	.178	2.9	57.3	47.0	70.1
40	.043	0.2	13.8	10.6	94.1
45	.068	0.4	21.9	15.5	87.5
50	.149	2.0	48.0	30.8	66.2
55	.202	3.8	65.0	37.3	49.7
60	.227	4.7	73.1	36.6	39.7
65	.226	4.7	72.8	30.8	37.0
70	.205	3.9	66.0	22.6	41.0
75	.168	2.6	54.1	14.0	50.7
80	.118	1.3	38.0	6.6	65.6
85	.061	0.3	19.6	1.7	83.4
90	.001	0.0	0.3	0.0	102.7
Minimum Clearance above TGL:					31.4 m

Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSIFML-2 Special

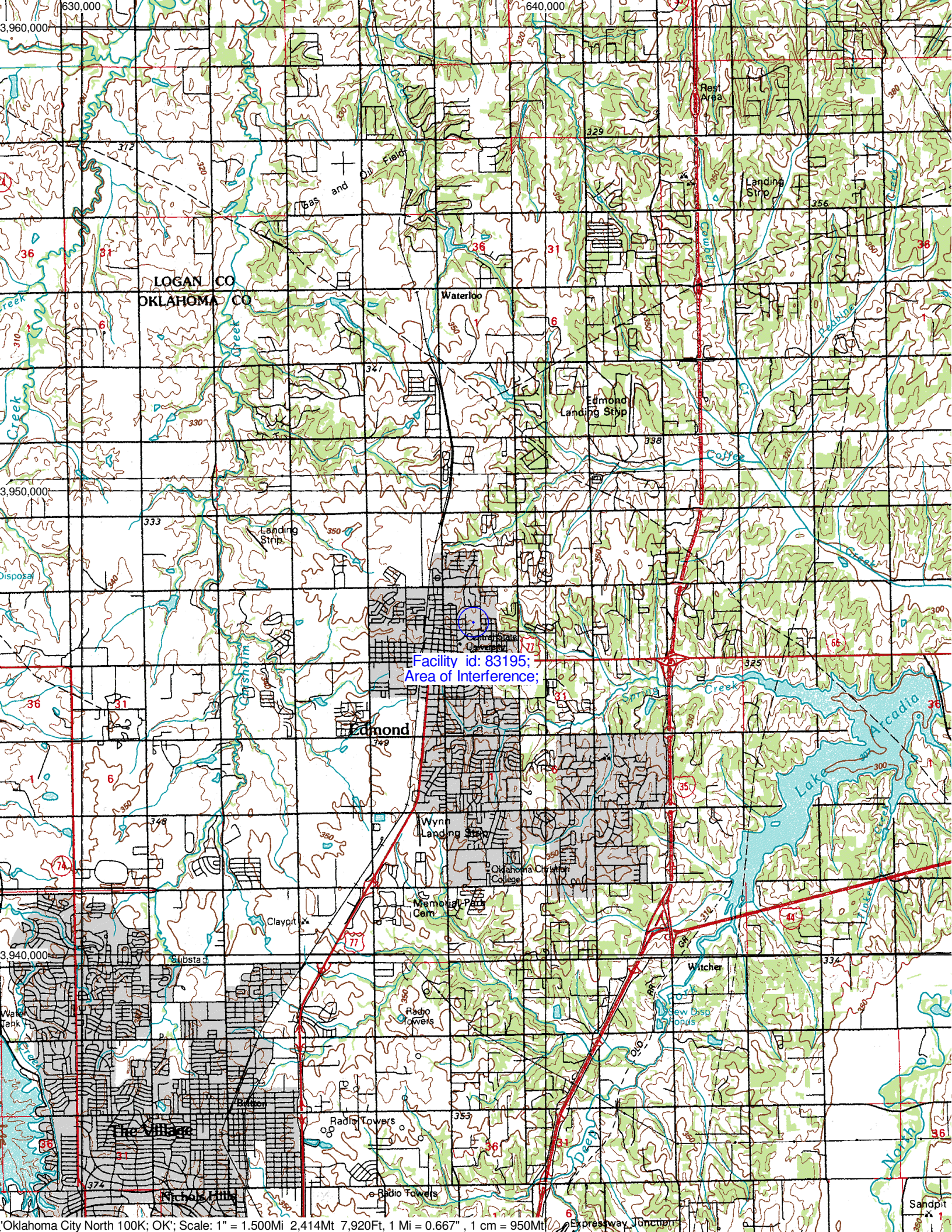
Bay spacing: 3/4 wave

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.00	0.001	-60.000	-50.00	0.149	-16.513	-10.00	0.903	-0.883
-89.00	0.012	-38.221	-49.00	0.135	-17.364	-9.00	0.921	-0.713
-88.00	0.025	-32.201	-48.00	0.120	-18.405	-8.00	0.937	-0.561
-87.00	0.037	-28.679	-47.00	0.104	-19.677	-7.00	0.952	-0.429
-86.00	0.049	-26.207	-46.00	0.086	-21.289	-6.00	0.964	-0.315
-85.00	0.061	-24.285	-45.00	0.068	-23.404	-5.00	0.975	-0.219
-84.00	0.073	-22.748	-44.00	0.048	-26.425	-4.00	0.984	-0.139
-83.00	0.085	-21.443	-43.00	0.027	-31.481	-3.00	0.991	-0.079
-82.00	0.096	-20.349	-42.00	0.005	-46.848	-2.00	0.996	-0.036
-81.00	0.107	-19.378	-41.00	0.018	-34.664	-1.00	0.999	-0.009
-80.00	0.118	-18.538	-40.00	0.043	-27.417	0.00	1.000	0.000
-79.00	0.129	-17.792	-39.00	0.068	-23.365	1.00	0.999	-0.009
-78.00	0.139	-17.125	-38.00	0.094	-20.529	2.00	0.996	-0.036
-77.00	0.149	-16.522	-37.00	0.121	-18.329	3.00	0.991	-0.079
-76.00	0.159	-15.984	-36.00	0.149	-16.531	4.00	0.984	-0.139
-75.00	0.168	-15.508	-35.00	0.178	-14.998	5.00	0.975	-0.219
-74.00	0.176	-15.072	-34.00	0.207	-13.669	6.00	0.964	-0.315
-73.00	0.184	-14.685	-33.00	0.237	-12.489	7.00	0.952	-0.429
-72.00	0.192	-14.335	-32.00	0.268	-11.431	8.00	0.937	-0.561
-71.00	0.199	-14.026	-31.00	0.299	-10.475	9.00	0.921	-0.713
-70.00	0.205	-13.752	-30.00	0.331	-9.602	10.00	0.903	-0.882
-69.00	0.211	-13.518	-29.00	0.363	-8.801	11.00	0.884	-1.072
-68.00	0.216	-13.315	-28.00	0.395	-8.061	12.00	0.863	-1.279
-67.00	0.220	-13.146	-27.00	0.428	-7.377	13.00	0.841	-1.508
-66.00	0.224	-13.009	-26.00	0.460	-6.742	14.00	0.817	-1.757
-65.00	0.226	-12.904	-25.00	0.493	-6.151	15.00	0.792	-2.029
-64.00	0.228	-12.834	-24.00	0.525	-5.599	16.00	0.765	-2.322
-63.00	0.229	-12.800	-23.00	0.557	-5.083	17.00	0.738	-2.639
-62.00	0.229	-12.794	-22.00	0.589	-4.603	18.00	0.710	-2.979
-61.00	0.228	-12.829	-21.00	0.620	-4.154	19.00	0.680	-3.344
-60.00	0.227	-12.898	-20.00	0.650	-3.736	20.00	0.650	-3.736
-59.00	0.224	-13.009	-19.00	0.680	-3.344	21.00	0.620	-4.154
-58.00	0.220	-13.158	-18.00	0.710	-2.979	22.00	0.589	-4.603
-57.00	0.215	-13.351	-17.00	0.738	-2.639	23.00	0.557	-5.083
-56.00	0.209	-13.600	-16.00	0.765	-2.323	24.00	0.525	-5.599
-55.00	0.202	-13.894	-15.00	0.792	-2.029	25.00	0.493	-6.151
-54.00	0.194	-14.260	-14.00	0.817	-1.759	26.00	0.460	-6.742
-53.00	0.184	-14.685	-13.00	0.840	-1.510	27.00	0.428	-7.377
-52.00	0.174	-15.192	-12.00	0.863	-1.281	28.00	0.395	-8.061
-51.00	0.162	-15.795	-11.00	0.884	-1.072	29.00	0.363	-8.801
						30.00	0.331	-9.602

Adjacent Channel Study **For Station K259AM, Facility_id: 83195**

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCMSL	Channel	Adj	Dist	Overlap
1250925	8797	BXMLH	20080723AAM	KATT-FM	CITADEL BROADCASTING COMPANY	C1	OKLAHOMA CITY	OK	LIC	43.65	711	263	2	8	0.549
1239753	8797	BLH	20080324AAX	KATT-FM	CITADEL BROADCASTING COMPANY	C1	OKLAHOMA CITY	OK	LIC	28.87	820	263	2	11.2	0.549
1247382	37123	BMPH	20070119AHJ	KZLS	CHISHOLM TRAIL BROADCASTING CO.	C2	MUSTANG	OK	CP MOD	39	552	259	2	39.6	0.549
1273739	37123	BMPH	20081112AKB	KZLS	CHISHOLM TRAIL BROADCASTING CO.	C3	MUSTANG	OK	APP	25	488	259	2	44.1	0
633831	142076	BNPFT	20030312APX	NEW	THE LOVE STATION, INC.	D	STILLWATER	OK	APP	0.25	376	259	2	53.4	0
633669	141939	BNPFT	20030312BCL	NEW	COMMUNITY BROADCASTING, INC.	D	STILLWATER	OK	APP	0.25	364	259	2	66.1	0
1032149	142416	BLFT	20041202AGB	K261CR	CAMERON UNIVERSITY	D	CHICKASHA	OK	LIC	0.092	499	261	0	90.2	0
1019436	14455	BLFT	20041201BFW	K262BI	CREATIVE EDUCATIONAL MEDIA CORPORATIO	D	ENID, ETC.	OK	LIC	0.125	480	262	1	97.3	0
588270	9941	BLH	20011128AAA	KYKC	CENTRAL OKLAHOMA COMMUNICATIONS, INC	C2	BYNG	OK	LIC	50	449	261	0	110.3	0
87689	68331	BLH	19860425KD	KXBL	JOURNAL BROADCAST CORPORATION	C1	HENRYETTA	OK	LIC	100	531	258	3	123	0
28838	37123	BLH	19810320AE	KZLS	CHISHOLM TRAIL BROADCASTING COMPANY	C1	ALVA	OK	LIC	100	650	259	2	125.8	0
1241618	35485	BLH	20080326AHG	KPNC	TEAM RADIO LLC	C3	PONCA CITY	OK	LIC	25	396	264	3	129.9	0



Facility id: 83195;
Area of Interference:

