

Non-Interference Compliance

Regarding Facility id 150872

Channel 261

Description of Exhibit 13 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.

Pages 4 through 5 include a tabulation of the vertical radiation pattern for the proposed antenna provided by the antenna manufacturer.

Page 6 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 7 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 8 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site.

Note: The tallest building within the zone of interference is less than 30ft (9.1m) tall. This proposal provides 17.3m (56.8ft) of ground clearance 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
1221766	BLH20071210ADE	WAPI-FM	83	82.4
260992	BLH19980128KB	WZRR	62	62
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				62

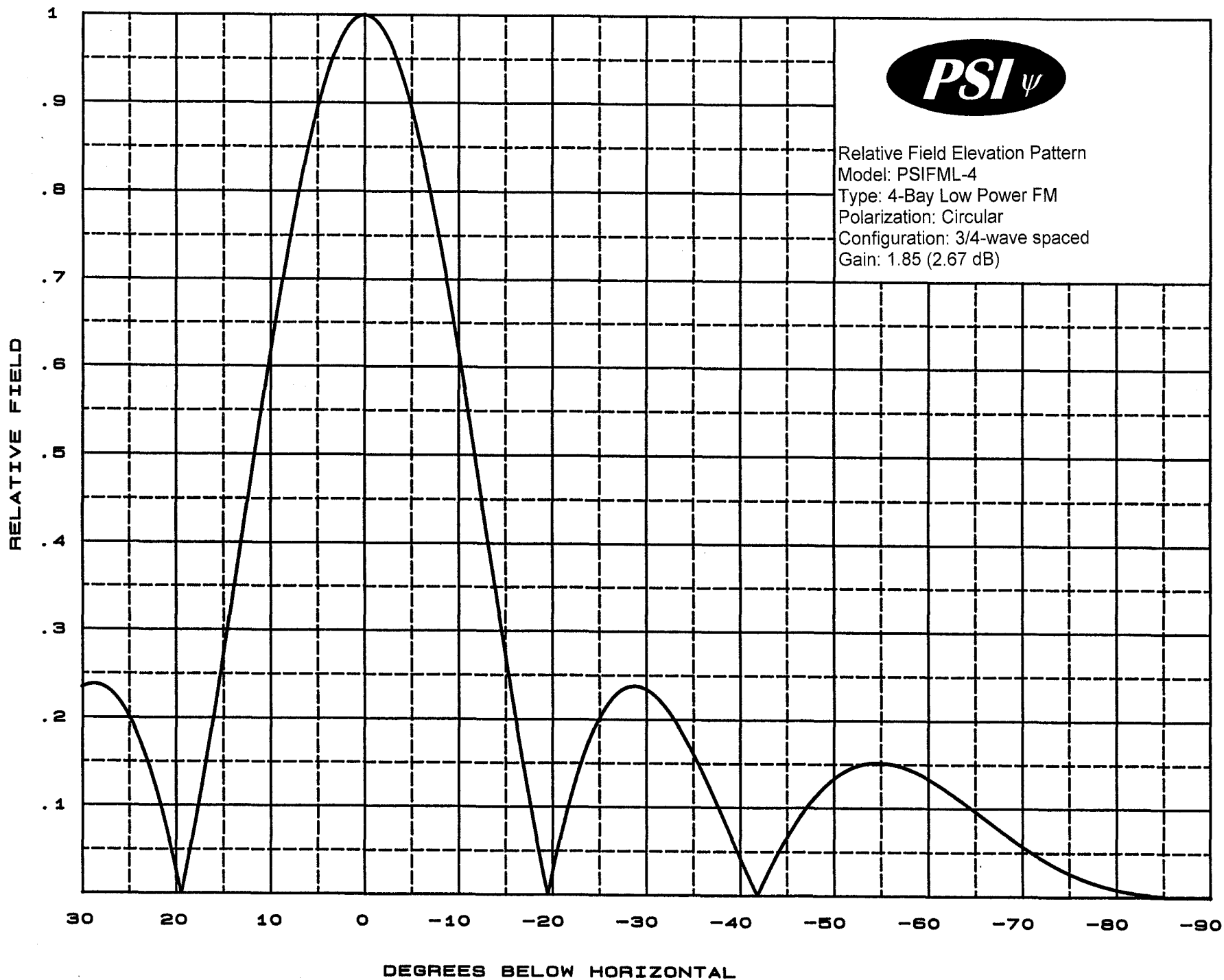
FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **62 dBμ**, this makes the proposed translator's worst-case interfering contour **102 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **881 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 7 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 **17.3 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.

Note: The tallest building within the zone of interference is less than 30ft (9.1m) tall. This proposal provides 17.3m (56.8ft) of ground clearance 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-4 (.75)DIR
CORAGL:	127 m
Maximum ERP:	0.25 kW
Interfering Contour:	102 dBμ
Max Int. Contour Distance:	881 m
Min Ground Clearance:	17.3 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	.894	199.8	787.6	784.6	58.4
10	.617	95.2	543.6	535.3	32.6
15	.272	18.5	239.6	231.5	65.0
20	.027	0.2	23.8	22.4	118.9
25	.201	10.1	177.1	160.5	52.2
30	.234	13.7	206.2	178.5	23.9
35	.161	6.5	141.8	116.2	45.6
40	.043	0.5	37.9	29.0	102.6
45	.086	1.8	75.8	53.6	73.4
50	.133	4.4	117.2	75.3	37.2
55	.152	5.8	133.9	76.8	17.3
60	.133	4.4	117.2	58.6	25.5
65	.097	2.4	85.5	36.1	49.6
70	.057	0.8	50.2	17.2	79.8
75	.027	0.2	23.8	6.2	104.0
80	.008	0.0	7.0	1.2	120.1
85	.001	0.0	0.9	0.1	126.1
90	.001	0.0	0.9	0.0	126.1
Minimum Clearance above TGL:					17.3 m





Propagation Systems Inc.
 Elevation Pattern Tabulation
 Antenna: PSIFML-4 Special
 Bay spacing: 3/4 wave

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
-90.0	0.001	-60.828	-50.0	0.133	-17.511	-10.0	0.617	-4.190
-89.0	0.001	-60.828	-49.0	0.124	-18.146	-9.0	0.682	-3.325
-88.0	0.001	-60.828	-48.0	0.112	-18.995	-8.0	0.743	-2.583
-87.0	0.001	-60.828	-47.0	0.099	-20.093	-7.0	0.799	-1.950
-86.0	0.001	-60.828	-46.0	0.083	-21.568	-6.0	0.850	-1.415
-85.0	0.001	-60.828	-45.0	0.066	-23.581	-5.0	0.894	-0.974
-84.0	0.002	-54.807	-44.0	0.047	-26.536	-4.0	0.931	-0.618
-83.0	0.003	-50.816	-43.0	0.027	-31.530	-3.0	0.961	-0.346
-82.0	0.004	-47.448	-42.0	0.004	-47.143	-2.0	0.982	-0.154
-81.0	0.006	-44.350	-41.0	0.018	-34.664	-1.0	0.996	-0.038
-80.0	0.008	-41.584	-40.0	0.043	-27.417	0.0	1.000	0.000
-79.0	0.011	-39.244	-39.0	0.067	-23.482	1.0	0.996	-0.038
-78.0	0.014	-37.021	-38.0	0.092	-20.770	2.0	0.983	-0.153
-77.0	0.018	-35.027	-37.0	0.116	-18.740	3.0	0.961	-0.345
-76.0	0.022	-33.164	-36.0	0.139	-17.134	4.0	0.931	-0.618
-75.0	0.027	-31.481	-35.0	0.161	-15.860	5.0	0.894	-0.972
-74.0	0.032	-29.946	-34.0	0.181	-14.829	6.0	0.850	-1.415
-73.0	0.037	-28.537	-33.0	0.199	-14.006	7.0	0.799	-1.948
-72.0	0.044	-27.203	-32.0	0.215	-13.370	8.0	0.743	-2.582
-71.0	0.050	-25.968	-31.0	0.226	-12.904	9.0	0.682	-3.325
-70.0	0.057	-24.841	-30.0	0.234	-12.607	10.0	0.617	-4.188
-69.0	0.065	-23.782	-29.0	0.238	-12.473	11.0	0.550	-5.193
-68.0	0.072	-22.802	-28.0	0.237	-12.517	12.0	0.481	-6.361
-67.0	0.080	-21.905	-27.0	0.230	-12.748	13.0	0.411	-7.728
-66.0	0.088	-21.078	-26.0	0.219	-13.200	14.0	0.341	-9.347
-65.0	0.097	-20.308	-25.0	0.201	-13.920	15.0	0.272	-11.305
-64.0	0.105	-19.614	-24.0	0.178	-14.983	16.0	0.205	-13.752
-63.0	0.112	-18.995	-23.0	0.149	-16.540	17.0	0.141	-16.993
-62.0	0.120	-18.427	-22.0	0.114	-18.867	18.0	0.081	-21.840
-61.0	0.127	-17.926	-21.0	0.073	-22.712	19.0	0.025	-32.147
-60.0	0.133	-17.491	-20.0	0.027	-31.431	20.0	0.027	-31.481
-59.0	0.139	-17.125	-19.0	0.025	-32.201	21.0	0.073	-22.730
-58.0	0.144	-16.827	-18.0	0.081	-21.840	22.0	0.114	-18.867
-57.0	0.148	-16.602	-17.0	0.141	-16.993	23.0	0.149	-16.540
-56.0	0.150	-16.452	-16.0	0.205	-13.752	24.0	0.178	-14.990
-55.0	0.152	-16.374	-15.0	0.272	-11.310	25.0	0.201	-13.920
-54.0	0.152	-16.391	-14.0	0.341	-9.351	26.0	0.219	-13.200
-53.0	0.150	-16.496	-13.0	0.411	-7.731	27.0	0.230	-12.748
-52.0	0.146	-16.709	-12.0	0.481	-6.364	28.0	0.237	-12.517
-51.0	0.141	-17.040	-11.0	0.550	-5.195	29.0	0.238	-12.473
						30.0	0.234	-12.607

file: FML 4-bay elevation tabulation

revision: A

Date: 1/28/08

Adjacent Channel Study **For Station W286BV, Facility_id: 150872**

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1221766	70914	BLH	20071210ADE	WAPI-FM	RADIO LICENSE HOLDING CBC, LLC	C1	HELENA	AL	LIC	69	430.4	263	2	25.3	0.7483
1183005	70914	BXLH	20070504ACQ	WAPI-FM	RADIO LICENSE HOLDING CBC, LLC	C1	NORTHPORT	AL	LIC	35	368.8	263	2	25.3	0.7483
260992	16899	BLH	19980128KB	WZRR	RADIO LICENSE HOLDING CBC, LLC	C0	BIRMINGHAM	AL	LIC	100	491	258	3	70.4	0.7483
633515	141831	BNPFT	20030317BVV	NEW	RADIO ASSIST MINISTRY, INC.	D	BESSEMER	AL	APP	0.01	316	260	1	58.6	0
1177228	16899	BXLH	20070411ACV	WZRR	RADIO LICENSE HOLDING CBC, LLC	C0	BIRMINGHAM	AL	LIC	50	438.8	258	3	70.4	0
632720	141178	BNPFT	20030311ANA	NEW	WAY-FM MEDIA GROUP, INC.	D	VESTAVIA HILLS	AL	APP	0.01	394	261	0	74.9	0
643885	150818	BNPFT	20030317BW	NEW	EDGEWATER BROADCASTING, INC.	D	BIRMINGHAM	AL	APP	0.01	601	260	1	75.1	0
639304	146714	BNPFT	20030317BW	NEW	EDGEWATER BROADCASTING, INC.	D	BIRMINGHAM	AL	APP	0.01	584.8	261	0	76.2	0
649628	156348	BNPFT	20030317IOU	NEW	EDUCATIONAL MEDIA FOUNDATION	D	SUMITON	AL	APP	0.01	264	261	0	80.4	0
649545	156267	BNPFT	20030317INT	NEW	EDUCATIONAL MEDIA FOUNDATION	D	FULTONDALE	AL	APP	0.019	250	261	0	83	0
1189380	150848	BLFT	20070601BSG	W262BQ	EDGEWATER BROADCASTING, INC.	D	LIVINGSTON	AL	LIC	0.038	111	262	1	88.2	0
151853	27455	BLH	19900824KA	WDXX	BROADSOUTH COMMUNICATIONS, INC.	C2	SELMA	AL	LIC	50	139	261	0	93.5	0
639338	146748	BNPFT	20030317BYH	NEW	EDGEWATER BROADCASTING, INC.	D	MOODY	AL	APP	0.01	350.7	261	0	108.9	0
230040	6664	BLH	19960730KC	WSMS	CUMULUS LICENSING LLC	C2	ARTESIA	MS	LIC	47	219	260	1	116.4	0
1290562	57436	BLH	20090121ACG	WRJL-FM	ROJO, INC.	C3	EVA	AL	LIC	25	362	260	1	147.2	0

Intermediate Frequencies (53 and 54 channels difference):

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
215724	1539	BLED	19951026KE	WALN	AMERICAN FAMILY ASSOCIATION	C2	CARROLLTON	AL	LIC	9.5	291	207	54	54.5	39.5
1264550	165498	BMPED	20080626AAC	WZLM	C W JOHNSON EDUCATION FOUNDATION INC.	A	JEMISON	AL	CP MOD	2.5	234	207	54	74.7	64.7
122044	20989	BLED	19881222KA	WBFR	FAMILY STATIONS, INC.	A	BIRMINGHAM	AL	LIC	0.1	398	208	53	74.8	64.8
1406071	87367	BMLD	20101108ABO	WRNF	THE MOODY BIBLE INSTITUTE OF CHICAGO	A	SELMA	AL	LIC	6	190.4	208	53	87.6	77.6
1409476	87367	BPED	20101124AGB	WRNF	THE MOODY BIBLE INSTITUTE OF CHICAGO	A	SELMA	AL	CP	6	190.4	208	53	87.6	77.6
1417347	150848	BPFT	20101122AAH	W262BQ	EDGEWATER BROADCASTING, INC.	D	LIVINGSTON	AL	CP	0.12	70	208	53	97.3	87.3

