

Non-Interference Compliance

Regarding Facility id 151474

Channel 282

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.

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 an aerial photo of the vicinity surrounding the proposed translator's tower site.

Note: The buildings in the zone of interference are less than 20ft (6.1m) in height. This proposal provides 75.5m 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
1105669	BLH20051227AGO	WTYB	83.9	83.9
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				83.9

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 **83.9 dBμ**, this makes the proposed translator's worst-case interfering contour **123.9 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **41.8 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 **75.5 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 buildings in the zone of interference are less than 20ft (6.1m) in height. This proposal provides 75.5m 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:	NIC
Antenna Model:	BKG77
CORAGL:	94 m
Maximum ERP:	0.087 kW
Interfering Contour:	123.9 dBμ
Max Int. Contour Distance:	41.8 m
Min Ground Clearance:	75.5 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	.999	86.8	41.7	41.6	90.4
10	.982	83.9	41.0	40.4	86.9
15	.954	79.2	39.8	38.5	83.7
20	.918	73.3	38.3	36.0	80.9
25	.871	66.0	36.4	33.0	78.6
30	.818	58.2	34.2	29.6	76.9
35	.758	50.0	31.7	25.9	75.8
40	.691	41.5	28.9	22.1	75.5
45	.616	33.0	25.7	18.2	75.8
50	.538	25.2	22.5	14.4	76.8
55	.465	18.8	19.4	11.1	78.1
60	.391	13.3	16.3	8.2	79.9
65	.313	8.5	13.1	5.5	82.2
70	.239	5.0	10.0	3.4	84.6
75	.176	2.7	7.3	1.9	86.9
80	.128	1.4	5.3	0.9	88.7
85	.103	0.9	4.3	0.4	89.7
90	.105	1.0	4.4	0.0	89.6
Minimum Clearance above TGL:					75.5 m



BK077

Vertical	-66	0.297	54	0.479	174	0.468
Values	-63	0.345	57	0.436	177	0.479
-180	0.487	-60	0.391	60	0.391	
-177	0.478	-57	0.436	63	0.345	
-174	0.467	-54	0.479	66	0.297	
-171	0.460	-51	0.523	69	0.253	
-168	0.454	-48	0.568	72	0.211	
-165	0.447	-45	0.616	75	0.176	
-162	0.439	-42	0.661	78	0.145	
-159	0.429	-39	0.706	81	0.120	
-156	0.419	-36	0.745	84	0.105	
-153	0.402	-33	0.783	87	0.100	
-150	0.385	-30	0.818	90	0.105	
-147	0.369	-27	0.852	93	0.118	
-144	0.359	-24	0.881	96	0.134	
-141	0.350	-21	0.910	99	0.151	
-138	0.338	-18	0.934	102	0.168	
-135	0.326	-15	0.954	105	0.185	
-132	0.314	-12	0.972	108	0.202	
-129	0.303	-9	0.987	111	0.219	
-126	0.290	-6	0.999	114	0.236	
-123	0.278	-3	0.999	117	0.252	
-120	0.265	0	1.000	120	0.265	
-117	0.251	3	0.999	123	0.278	
-114	0.236	6	0.999	126	0.290	
-111	0.218	9	0.987	129	0.304	
-108	0.202	12	0.972	132	0.314	
-105	0.185	15	0.954	135	0.327	
-102	0.168	18	0.934	138	0.338	
-99	0.151	21	0.910	141	0.350	
-96	0.134	24	0.881	144	0.360	
-93	0.118	27	0.852	147	0.370	
-90	0.105	30	0.818	150	0.386	
-87	0.100	33	0.783	153	0.403	
-84	0.105	36	0.745	156	0.420	
-81	0.120	39	0.706	159	0.430	
-78	0.145	42	0.661	162	0.440	
-75	0.176	45	0.616	165	0.448	
-72	0.211	48	0.568	168	0.455	
-69	0.253	51	0.523	171	0.461	

Better than SWR

Adjacent Channel Study
For Station W282AR, Facility_id: 151474

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1155686	14069	BXLH	20061020ACS	WTYB	CUMULUS LICENSING LLC	C2	TYBEE ISLAND	GA	LIC	15	106	280	2	12.3	0.5192
1105669	14069	BLH	20051227AGO	WTYB	CUMULUS LICENSING LLC	C2	TYBEE ISLAND	GA	LIC	50	106	280	2	12.3	0.5192
1193413	153405	BLFT	20070702ABJ	W282AT	EDGEWATER BROADCASTING, INC.	D	HILTON HEAD ISLAND	SC	LIC	0.082	20	282	0	38.1	0
200700	40705	BLH	19940705KC	WLHH	LOW COUNTRY RADIO, LLC	C3	RIDGELAND	SC	LIC	16	128	285	3	47.1	0
192875	7816	BLH	19931210KC	WTHG	WRGO-FM RADIO LLC D/B/A SAVANNAH RADIO	C3	HINESVILLE	GA	LIC	12	165	284	2	60.4	0
1180811	151458	BLFT	20070409AAA	W279AR	EDGEWATER BROADCASTING, INC.	D	JESUP	GA	LIC	0.005	41	279	3	86	0
204164	73247	BMLH	19941118KF	WBMZ	WM. JIMMY PAGE, TR/AS RADIO METTER	A	METTER	GA	APP	6	160	279	3	92.5	0
289461	73247	BLH	7748	WBMZ	WM. JIMMY PAGE, TR/AS RADIO METTER	A	METTER	GA	LIC	3	160	285	3	92.5	0
285872	73932	BLH	19990603KI	WRBX	WILLIAM KEITH REGISTER	A	REIDSVILLE	GA	LIC	4.9	158	281	1	92.7	0
200765	472	BLH	19940706KB	WRJY	GOLDEN ISLES BROADCASTING, LLC	A	BRUNSWICK	GA	LIC	4.2	120	281	1	101.4	0
1316072	151451	BLFT	20090603AFY	W279BC	EDGEWATER BROADCASTING, INC.	D	BRUNSWICK	GA	LIC	0.08	54	279	3	101.7	0
1410985	151451	BMPFT	20101108AAU	W279BC	EDGEWATER BROADCASTING, INC.	D	BRUNSWICK	GA	APP	0.25	82	279	3	106.5	0
1405965	151451	BMPFT	20101108AAU	W279BC	EDGEWATER BROADCASTING, INC.	D	BRUNSWICK	GA	APP	0.25	82	279	3	106.5	0
1246785	38901	BMLH	20080521AAQ	WRFQ	CITICASTERS LICENSES, INC.	C1	MOUNT PLEASANT	SC	LIC	100	202	283	1	149.3	0



Facility id: 151474;
Area of Interference;

Feet	M
1	0.3
2	0.6
3	0.9
4	1.2
5	1.5
6	1.8
7	2.1
8	2.4
9	2.7
10	3.0

To convert feet
multiply by .3
To convert meters
multiply by 3.28

