

[Exhibit 12]

Non-Interference Compliance

Regarding Facility id 148550

Channel 205

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.

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 dB μ 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 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.

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 dB μ 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
100569	BLED19870417KD	WRAS	60.5	60.5
1208736	BLED20071001DQH	WRFG	67.5	63.5

Minimum F(50,50) Contour of Adjacent Station within
Proposed Translator's Standard Interfering Contour **60.5**

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 **60.5 dB μ** , this makes the proposed translator's worst-case interfering contour **100.5 dB μ** . By the free-space equation, this contour is calculated to extend a maximum of **175.2 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 **6.8 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 tallest building within the zone of interference is less than 15ft (4.6m) in height. This proposal provides 6.8m (22ft) 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: BKG77-2(.5)
CORAGL: 56 m
Maximum ERP: 0.007 kW
Interfering Contour: 100.5 dB μ
Max Int. Contour Distance: 175.2 m
Min Ground Clearance: 6.8 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	.973	6.6	170.5	169.8	41.1
10	.933	6.1	163.5	161.0	27.6
15	.855	5.1	149.8	144.7	17.2
20	.777	4.2	136.1	127.9	9.4
25	.664	3.1	116.3	105.4	6.8
30	.560	2.2	98.1	85.0	6.9
35	.456	1.5	79.9	65.4	10.2
40	.365	0.9	64.0	49.0	14.9
45	.292	0.6	51.2	36.2	19.8
50	.227	0.4	39.8	25.6	25.5
55	.172	0.2	30.1	17.3	31.3
60	.126	0.1	22.1	11.0	36.9
65	.096	0.1	16.8	7.1	40.8
70	.072	0.0	12.6	4.3	44.1
75	.056	0.0	9.8	2.5	46.5
80	.046	0.0	8.1	1.4	48.1
85	.039	0.0	6.8	0.6	49.2
90	.035	0.0	6.1	0.0	49.9
Minimum Clearance above TGL:					6.8 m

TX station: TV Mondiale

Site name: Monte Alto

Frequency: 100.00 MHz

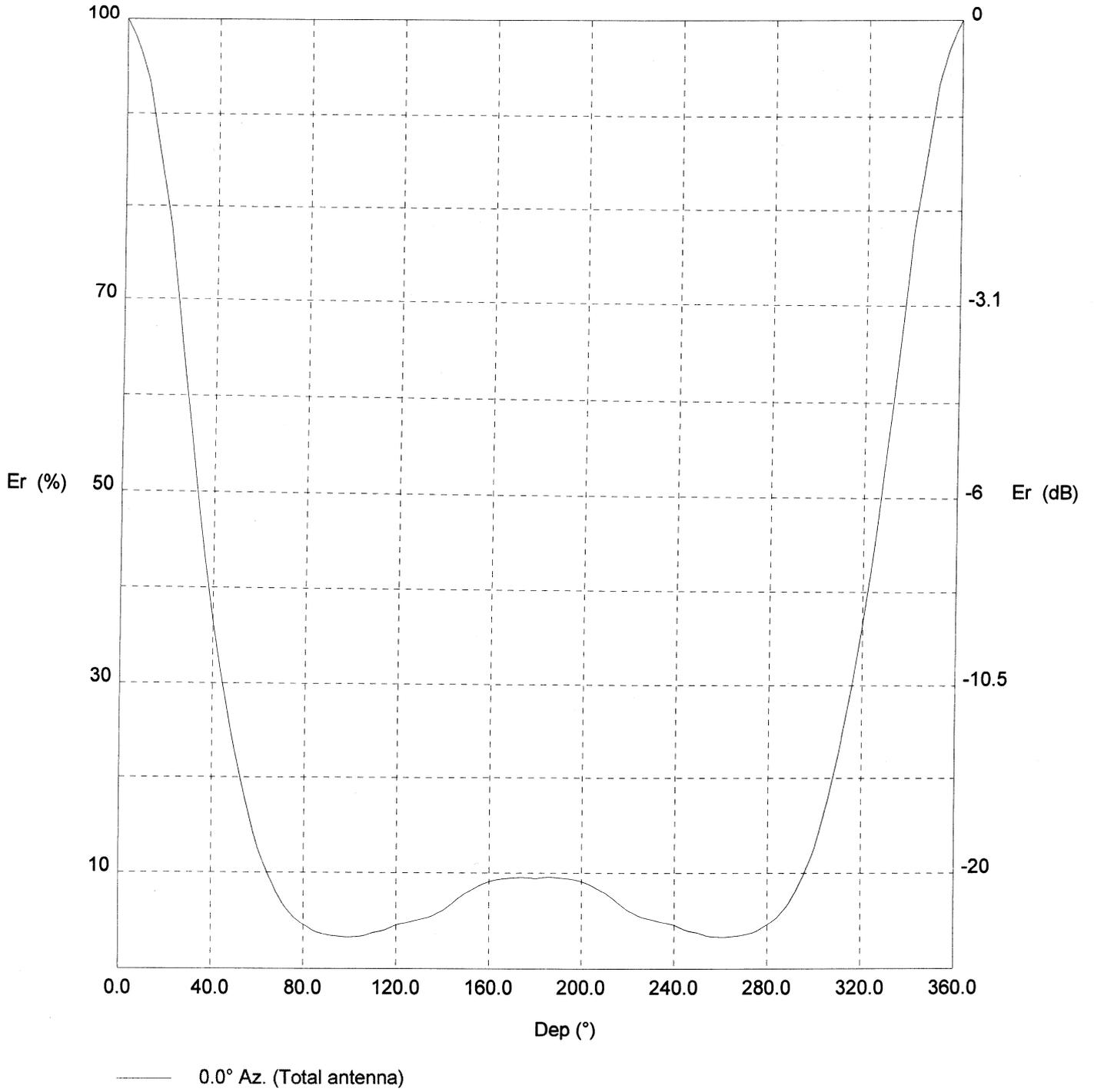
Vertical diagram at an azimuth of 0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
0.0	100.0	8.73	120.0	4.5	0.02	240.0	4.5	0.02
2.0	99.1	8.57	122.0	4.6	0.02	242.0	4.3	0.02
4.0	98.0	8.38	124.0	4.7	0.02	244.0	4.1	0.01
6.0	96.6	8.15	126.0	4.9	0.02	246.0	3.9	0.01
8.0	95.1	7.89	128.0	5.0	0.02	248.0	3.8	0.01
10.0	93.3	7.60	130.0	5.1	0.02	250.0	3.7	0.01
12.0	90.3	7.11	132.0	5.3	0.02	252.0	3.6	0.01
14.0	87.1	6.62	134.0	5.4	0.03	254.0	3.4	0.01
16.0	83.9	6.15	136.0	5.6	0.03	256.0	3.3	0.01
18.0	80.9	5.71	138.0	5.8	0.03	258.0	3.3	0.01
20.0	77.7	5.28	140.0	6.1	0.03	260.0	3.3	0.01
22.0	73.1	4.67	142.0	6.5	0.04	262.0	3.3	0.01
24.0	68.6	4.10	144.0	6.8	0.04	264.0	3.3	0.01
26.0	64.2	3.60	146.0	7.2	0.05	266.0	3.4	0.01
28.0	60.0	3.15	148.0	7.6	0.05	268.0	3.4	0.01
30.0	56.0	2.73	150.0	7.9	0.05	270.0	3.5	0.01
32.0	51.7	2.33	152.0	8.2	0.06	272.0	3.6	0.01
34.0	47.5	1.97	154.0	8.4	0.06	274.0	3.8	0.01
36.0	43.6	1.66	156.0	8.7	0.07	276.0	4.0	0.01
38.0	40.0	1.40	158.0	8.9	0.07	278.0	4.2	0.02
40.0	36.5	1.17	160.0	9.1	0.07	280.0	4.6	0.02
42.0	33.5	0.98	162.0	9.2	0.07	282.0	4.9	0.02
44.0	30.5	0.81	164.0	9.3	0.08	284.0	5.3	0.02
46.0	27.8	0.67	166.0	9.4	0.08	286.0	5.9	0.03
48.0	25.1	0.55	168.0	9.5	0.08	288.0	6.5	0.04
50.0	22.7	0.45	170.0	9.5	0.08	290.0	7.2	0.05
52.0	20.3	0.36	172.0	9.5	0.08	292.0	8.1	0.06
54.0	18.2	0.29	174.0	9.5	0.08	294.0	9.1	0.07
56.0	16.2	0.23	176.0	9.5	0.08	296.0	10.1	0.09
58.0	14.3	0.18	178.0	9.5	0.08	298.0	11.3	0.11
60.0	12.6	0.14	180.0	9.4	0.08	300.0	12.6	0.14
62.0	11.3	0.11	182.0	9.5	0.08	302.0	14.3	0.18
64.0	10.1	0.09	184.0	9.5	0.08	304.0	16.2	0.23
66.0	9.1	0.07	186.0	9.6	0.08	306.0	18.2	0.29
68.0	8.1	0.06	188.0	9.5	0.08	308.0	20.3	0.36
70.0	7.2	0.05	190.0	9.5	0.08	310.0	22.7	0.45
72.0	6.5	0.04	192.0	9.5	0.08	312.0	25.1	0.55
74.0	5.9	0.03	194.0	9.4	0.08	314.0	27.8	0.67
76.0	5.3	0.02	196.0	9.3	0.08	316.0	30.5	0.81
78.0	4.9	0.02	198.0	9.2	0.07	318.0	33.5	0.98
80.0	4.6	0.02	200.0	9.1	0.07	320.0	36.5	1.17
82.0	4.2	0.02	202.0	8.9	0.07	322.0	40.0	1.40
84.0	4.0	0.01	204.0	8.7	0.07	324.0	43.6	1.66
86.0	3.8	0.01	206.0	8.4	0.06	326.0	47.5	1.97
88.0	3.6	0.01	208.0	8.2	0.06	328.0	51.7	2.33
90.0	3.5	0.01	210.0	7.9	0.05	330.0	56.0	2.73
92.0	3.4	0.01	212.0	7.6	0.05	332.0	60.0	3.15
94.0	3.4	0.01	214.0	7.2	0.05	334.0	64.2	3.60
96.0	3.3	0.01	216.0	6.8	0.04	336.0	68.6	4.10
98.0	3.3	0.01	218.0	6.5	0.04	338.0	73.1	4.67
100.0	3.3	0.01	220.0	6.1	0.03	340.0	77.7	5.28
102.0	3.3	0.01	222.0	5.8	0.03	342.0	80.9	5.71
104.0	3.3	0.01	224.0	5.6	0.03	344.0	83.9	6.15
106.0	3.4	0.01	226.0	5.4	0.03	346.0	87.1	6.62
108.0	3.6	0.01	228.0	5.3	0.02	348.0	90.3	7.11
110.0	3.7	0.01	230.0	5.1	0.02	350.0	93.3	7.60
112.0	3.8	0.01	232.0	5.0	0.02	352.0	95.1	7.89
114.0	3.9	0.01	234.0	4.9	0.02	354.0	96.6	8.15
116.0	4.1	0.01	236.0	4.7	0.02	356.0	98.0	8.38
118.0	4.3	0.02	238.0	4.6	0.02	358.0	99.1	8.57

TX station: TV Mondiale
Frequency: 100.00 MHz

Site name: Monte Alto

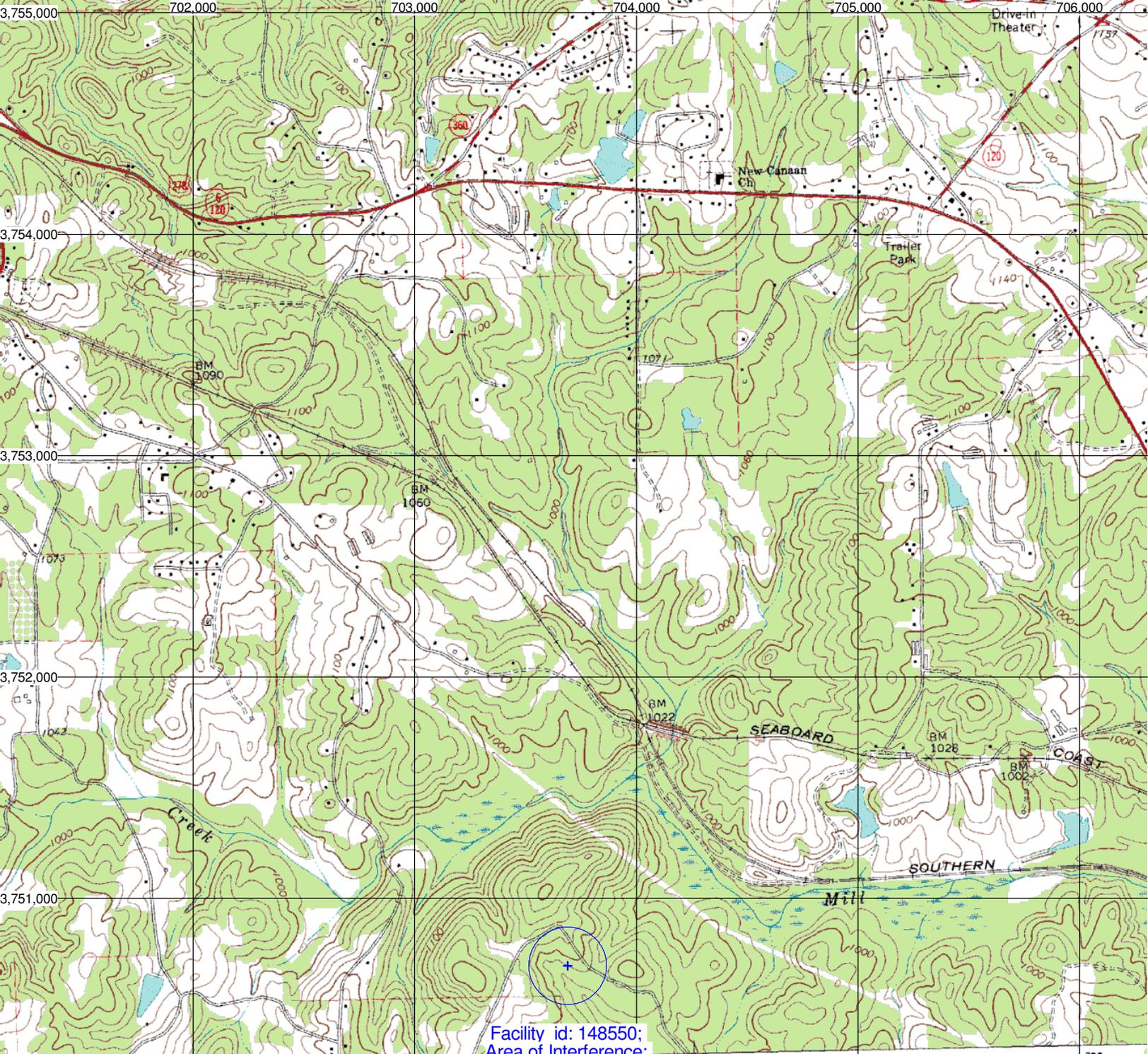
Vertical diagram



**Adjacent Channel Study
For Station W205CI, Facility_id: 148550**

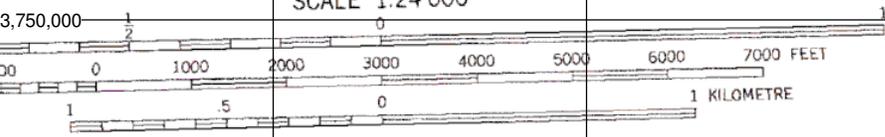
Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1208736	54585	BLED	20071001DQH	WRFG	RADIO FREE GEORGIA BROADCASTING FOUNI	C1	ATLANTA	GA	LIC	65	432	207	2	43.1	0.0418
100569	23959	BLED	19870417KD	WRAS	GEORGIA STATE UNIVERSITY	C1	ATLANTA	GA	LIC	100	401	203	2	51.7	0.0418
1294813	169466	BMPED	20090209ABK	WEYY	OLD TIME GOSPEL MINISTRIES	A	TALLAPOOSA	GA	CP MOD	4	355	204	1	50.7	0
1208875	173263	BNPED	20071012AFG	NEW	SOUTHWEST RADIO CHURCH OF THE AIR, INC	A	CEDARTOWN	GA	APP	1	347	208	3	50.8	0
1026006	23959	BXLED	20041110ACN	WRAS	THE BOARD OF REGENTS OF THE UNIVERSITY	C1	ATLANTA	GA	LIC	37	361	203	2	51.7	0
1271242	177189	BNPED	20071022BHR	NEW	HARVEST CHRISTIAN FELLOWSHIP, INC.	C3	PIEDMONT	AL	APP	7.1	379	208	3	60.6	0
1061697	92876	BLED	20050512ADF	WKNG-FM	COVENANT COMMUNICATIONS INC.	A	HEFLIN	AL	LIC	0.25	533	206	1	70.8	0
1198365	171676	BNPED	20071015ABB	NEW	ALABAMA CHRISTIAN RADIO INC	A	PIEDMONT	AL	APP	0.3	278	208	3	72.8	0
691400	90341	BLED	20000303AAA	WIVL	COMMUNITY PUBLIC RADIO, INC.	A	JASPER	GA	LIC	0.2	451	202	3	73.6	0
1213398	175734	BNPED	20071017ABV	NEW	JOY CHRISTIAN COMMUNICATIONS, INC	A	PIEDMONT	AL	APP	0.5	256	208	3	73.9	0
1087199	28334	BLED	20050630AEC	WJCK	IMMANUEL BROADCASTING NETWORK	C3	PIEDMONT	AL	LIC	2.7	556	202	3	86.5	0
428784	23908	BLED	19991215ABA	WKEU-FM	GEORGIA FOUNDATION OF PUBLIC B/CING, INC	C2	THE ROCK	GA	LIC	5	466	205	0	107	0
612785	66021	BMLD	20020919AAA	WMBW	THE MOODY BIBLE INSTITUTE OF CHICAGO	C	CHATTANOOGA	TN	LIC	98	760	205	0	131.7	0



Facility id: 148550;
Area of Interference;

702 (NEBO)
4051 IV SE
SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
OLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

