

Non-Interference Compliance

Regarding Facility id 152237

Channel 257

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.

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
660254	BLH20030514ABW	WWWQ	67.7	67.7
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				67.7

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 **67.7 dBμ**, this makes the proposed translator's worst-case interfering contour **107.7 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **160.9 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 **38.2 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.

Antenna Manufacturer:	PSI
Antenna Model:	FML-2(.75)
CORAGL:	74 m
Maximum ERP:	0.031 kW
Interfering Contour:	107.7 dBμ
Max Int. Contour Distance:	160.9 m
Min Ground Clearance:	38.2 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	29.5	156.9	156.3	60.3
10	.903	25.3	145.3	143.1	48.8
15	.792	19.4	127.5	123.1	41.0
20	.650	13.1	104.6	98.3	38.2
25	.493	7.5	79.3	71.9	40.5
30	.331	3.4	53.3	46.1	47.4
35	.178	1.0	28.6	23.5	57.6
40	.043	0.1	6.9	5.3	69.6
45	.068	0.1	10.9	7.7	66.3
50	.149	0.7	24.0	15.4	55.6
55	.202	1.3	32.5	18.6	47.4
60	.227	1.6	36.5	18.3	42.4
65	.226	1.6	36.4	15.4	41.0
70	.205	1.3	33.0	11.3	43.0
75	.168	0.9	27.0	7.0	47.9
80	.118	0.4	19.0	3.3	55.3
85	.061	0.1	9.8	0.9	64.2
90	.001	0.0	0.2	0.0	73.8
Minimum Clearance above TGL:					38.2 m

Propagation Systems Inc.

Elevation Pattern Tabulation

Antenna: PSIFML-2 Special

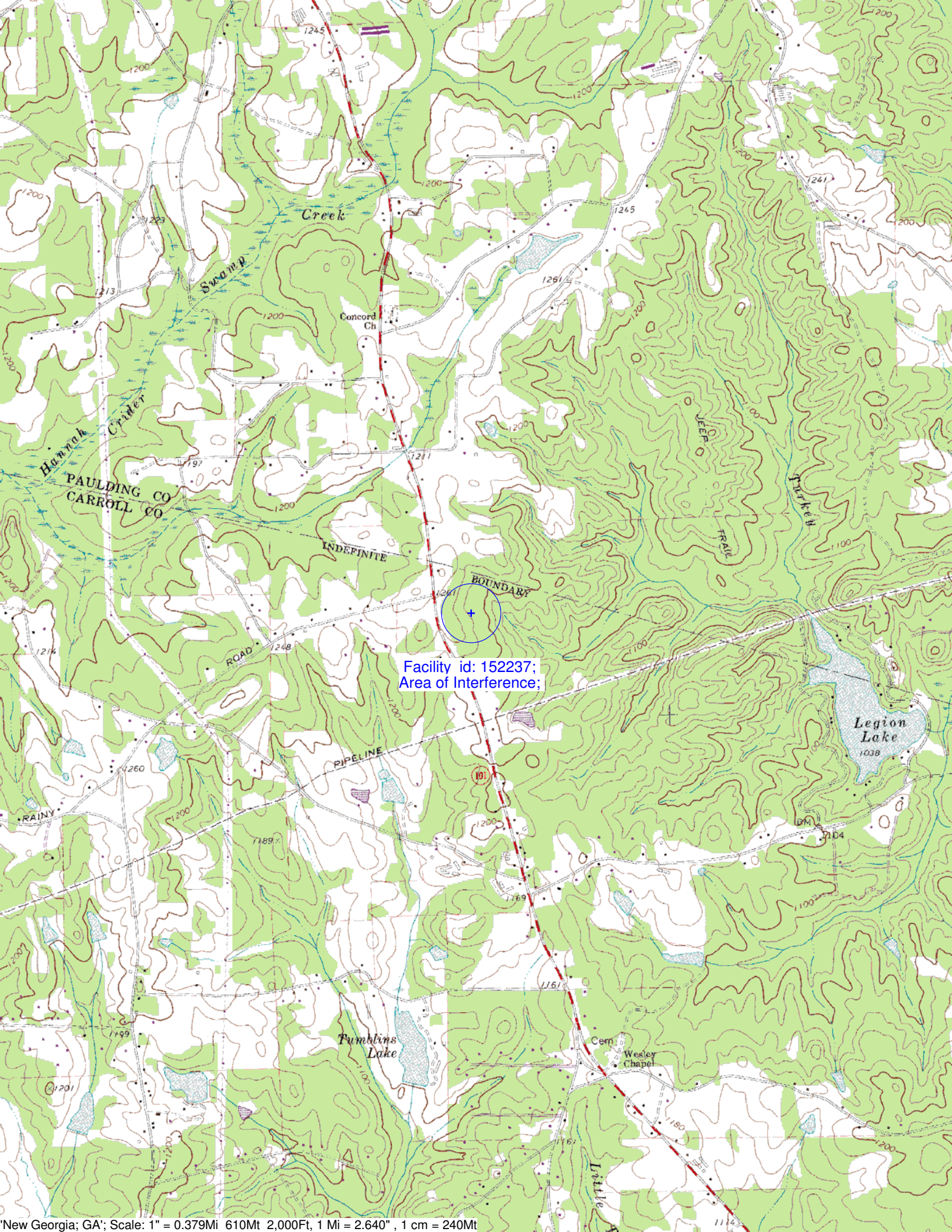
Bay spacing: 3/4 wave

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

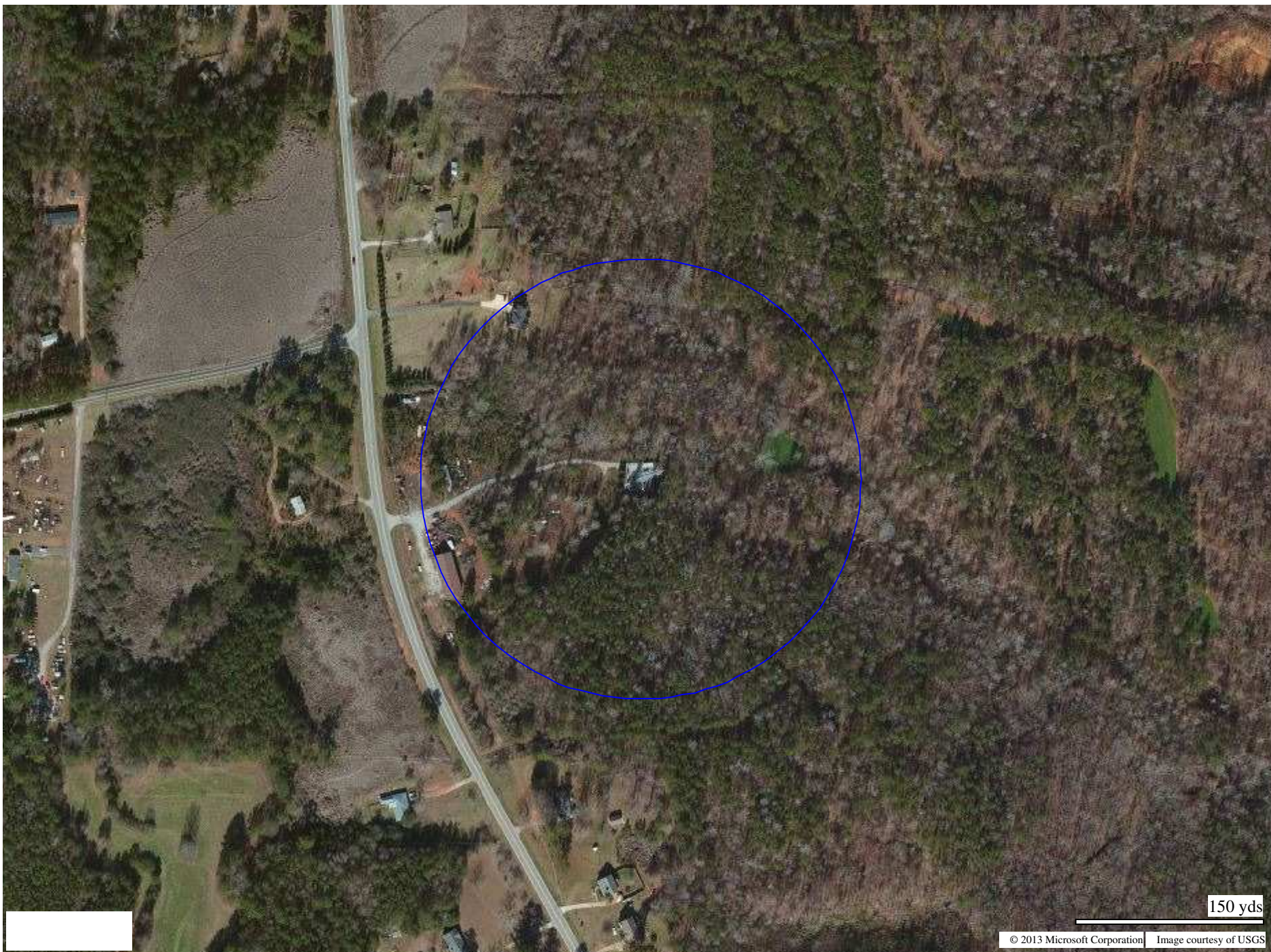
Adjacent Channel Study
For Station NEW, Facility_id: 152237

Co-channel through third adjacent:

App_id	Fac_id	File_Number	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Chan	Adj	Dist	Overlap
660254	73345	BLH-20030514ABW	WWWQ	SUSQUEHANNA RADIO CORP.	C0	ATLANTA	GA	LIC	96.6	612	259	2	58.3	0.4791
1397225	183308	BLH-20100927AAH	WWGA	WKNG, LLC	A	TALLAPOOSA	GA	LIC	1.85	520	255	2	34.2	0
1547485	141205	BNPFT-20030311ANK	NEW	WAY MEDIA , INC.	D	OAKLAND HEIGHTS	GA	APP	0.01	408	257	0	51	0
1563005	147620	BNPFT-20030314CKA	NEW	ALABAMA CHRISTIAN RADIO INC	D	ROME	GA	APP	0.17	223	258	1	52.9	0
1560572	140317	BNPFT-20030317AQQ	NEW	BROADCAST INVESTMENT ASSOCIATES, INC.	D	ROME	GA	APP	0.25	259	254	3	56.3	0
1444237	148550	BLFT-20110915ACL	W255CJ	CUMULUS LICENSING LLC	D	ATLANTA	GA	LIC	0.25	588	255	2	58.3	0
638277	145718	BNPFT-20030317KWW	NEW	CALHOUN SEVENTH-DAY ADVENTIST CHURCH	D	PLAINVILLE	GA	APP	0.01	410	257	0	74.2	0
1308827	139979	BLFT-20090417ABQ	W256BH	THE JEFF BECK BROADCASTING GROUP, LLC	D	OXFORD	AL	LIC	0.11	274	256	1	79	0
1187600	149788	BLFT-20070523ADL	W257AA	RADIO TRAINING NETWORK, INC.	D	LA GRANGE	GA	LIC	0.027	285	257	0	83.2	0
1558219	141697	BNPFT-20030311AOO	NEW	WAY MEDIA , INC.	D	DAMASCUS	GA	APP	0.01	346	259	2	83.7	0
1506459	142703	BLFT-20120703ABB	W257CT	GADSDEN RADIO MEDIA, LLC	D	GADSDEN	AL	LIC	0.25	388	257	0	97.3	0
1318035	2309	BMLD-20090615AFD	WNGH-FM	THE FOUNDATION FOR PUBLIC BROADCASTING I	C3	CHATSWORTH	GA	LIC	0.42	892.4	255	2	108.7	0



Facility id: 152237;
Area of Interference;



150 yds