

[Exhibit 13]

Non-Interference Compliance

Regarding Facility id 150999

Channel 243

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 6 include a tabulation of the vertical radiation pattern for the proposed antenna provided by the antenna manufacturer.

Page 7 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 8 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 9 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site.

Note: The tallest building in the zone of predicted interference is less than 15ft (4.6m) tall. This proposal provides 128.6m (422m) 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 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
1311860	BLH20090512AAA	WWMG	97.4	97.4
169274	BLH19920130KA	WQKS-FM	134.5	105.3

Minimum F(50,50) Contour of Adjacent Station within
Proposed Translator's Standard Interfering Contour **97.4**

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 **97.4 dB μ** , this makes the proposed translator's worst-case interfering contour **137.4 dB μ** . By the free-space equation, this contour is calculated to extend a maximum of **15 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 8 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 **128.6 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 in the zone of predicted interference is less than 15ft (4.6m) tall. This proposal provides 128.6m (422m) 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: JAM
Antenna Model: JCPB-2M (FW)
CORAGL: 134 m
Maximum ERP: 0.25 kW
Interfering Contour: 137.4 dB μ
Max Int. Contour Distance: 15 m
Min Ground Clearance: 128.6 m

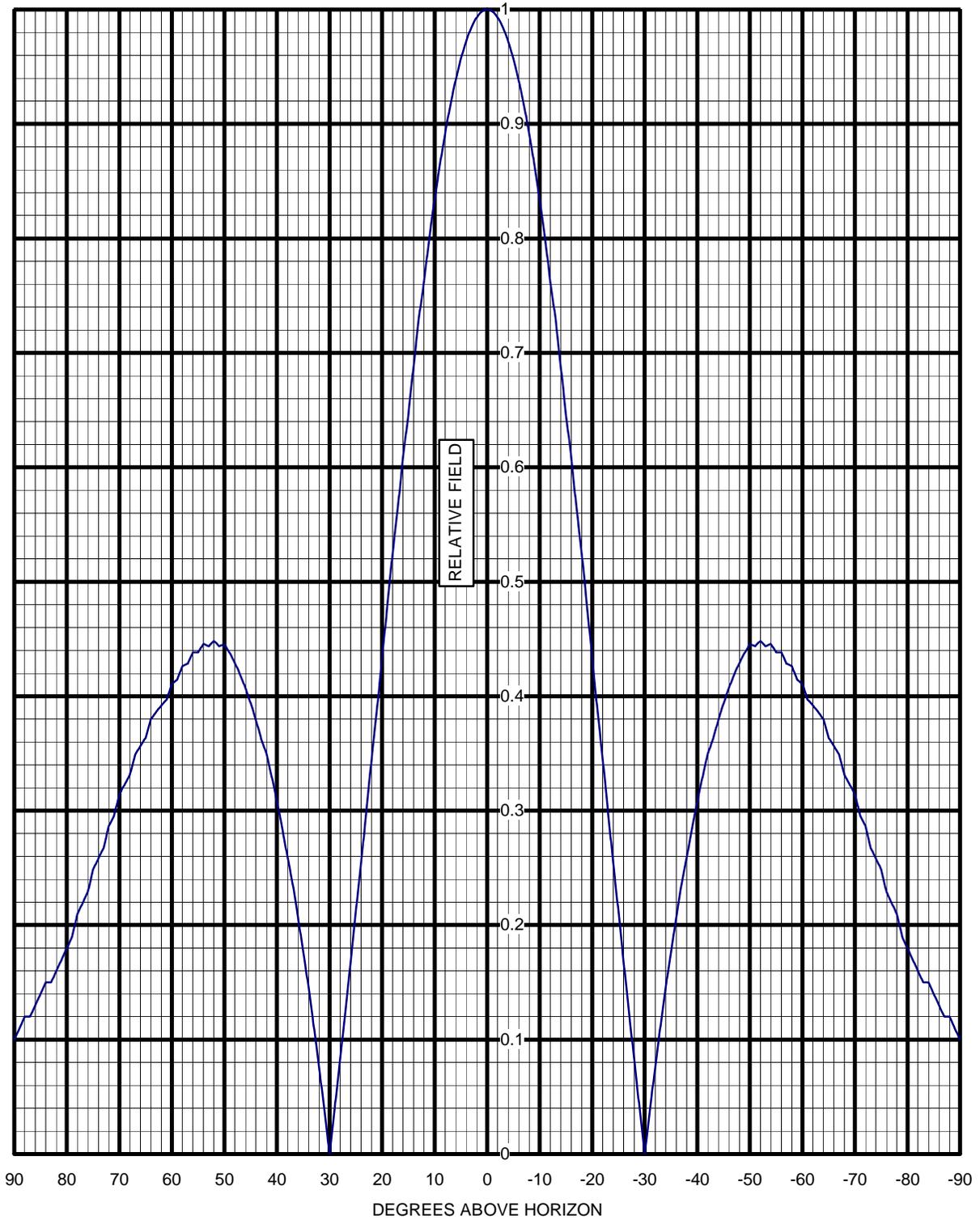
Depression Angle Below Horizontal	Antenna Relative Field	ERP (watts)	Distance to Interfering Contour from Antenna (m)	Horizontal Distance of Interfering Contour from Tower (m)	Vertical Clearance of Interfering Contour above TGL (m)
5	.957	229.0	14.3	14.3	132.8
10	.834	173.9	12.5	12.3	131.8
15	.646	104.3	9.7	9.3	131.5
20	.433	46.9	6.5	6.1	131.8
25	.212	11.2	3.2	2.9	132.7
30	.000	0.0	0.0	0.0	134.0
35	.176	7.7	2.6	2.2	132.5
40	.308	23.7	4.6	3.5	131.0
45	.394	38.8	5.9	4.2	129.8
50	.445	49.5	6.7	4.3	128.9
55	.438	48.0	6.6	3.8	128.6
60	.411	42.2	6.1	3.1	128.7
65	.364	33.1	5.4	2.3	129.1
70	.314	24.6	4.7	1.6	129.6
75	.249	15.5	3.7	1.0	130.4
80	.180	8.1	2.7	0.5	131.3
85	.140	4.9	2.1	0.2	131.9
90	.100	2.5	1.5	0.0	132.5
Minimum Clearance above TGL:					128.6 m



6340 Sky Creek Drive
Sacramento, California 95828 USA

Telephone (916) 383-1177
Fax (916) 383-1182

COMPUTED ELEVATION PATTERN



Customer: Stroh Comm.

Frequency: 101.5 & 107.5 MHz

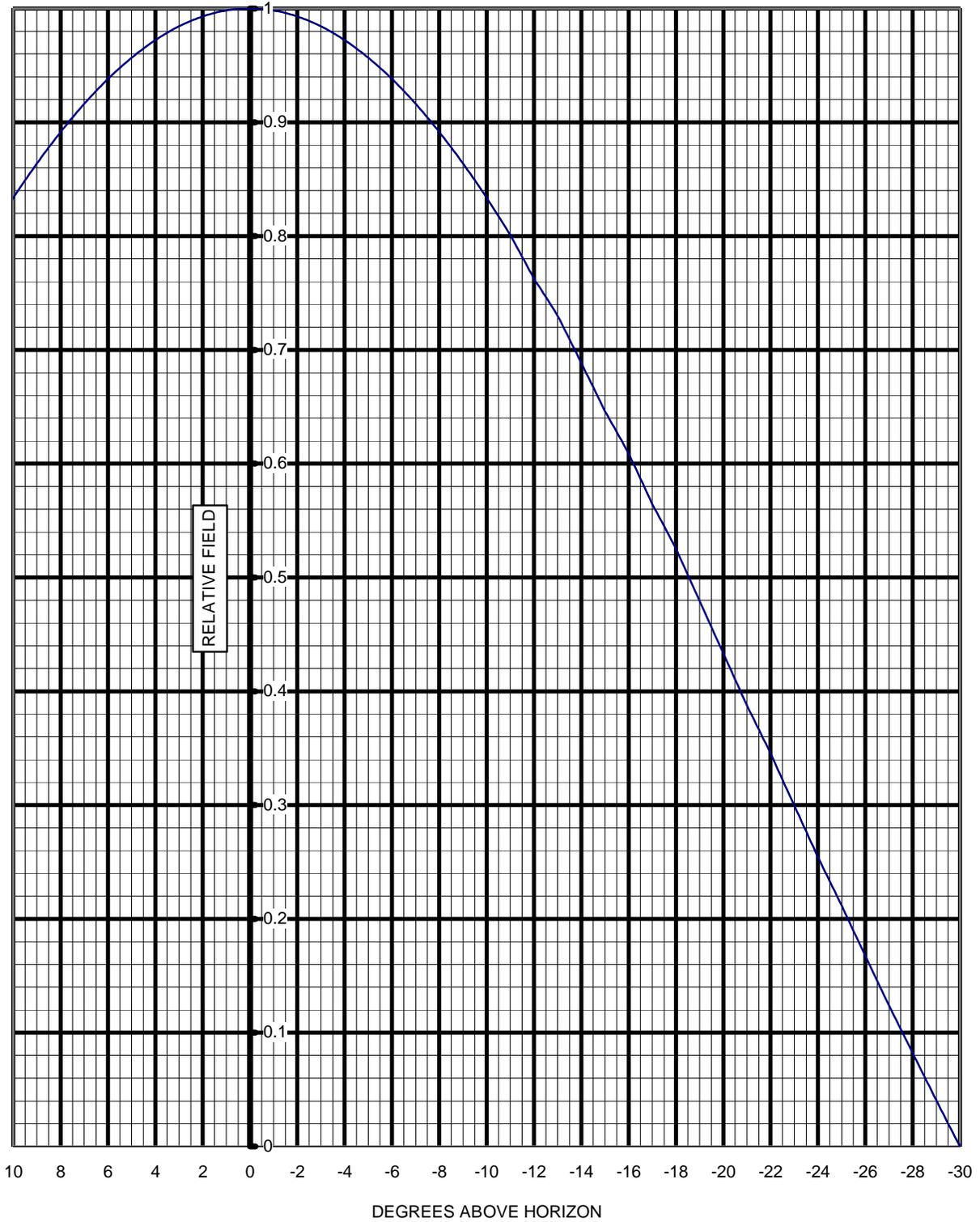
Model: JCPB-2M
Description: FM Sidemount Antenna
-0° Beam Tilt, 0% Null Fill



6340 Sky Creek Drive
Sacramento, California 95828 USA

Telephone (916) 383-1177
Fax (916) 383-1182

COMPUTED ELEVATION PATTERN



Customer: Stroh Comm.

Frequency: 101.5 & 107.5 MHz

Model: JCPB-2M
Description: FM Sidemount Antenna
-0° Beam Tilt, 0% Null Fill



6340 Sky Creek Drive
Sacramento, California 95828 USA

Telephone (916) 383-1177
Fax (916) 383-1182

Elevation Pattern Tabulation

ELEVATION PATTERN TABULATION

RELATIVE FIELD VS ELEVATION ANGLE

<u>ELEVATION ANGLE</u>	<u>RELATIVE FIELD</u>	<u>ELEVATION ANGLE</u>	<u>RELATIVE FIELD</u>	<u>ELEVATION ANGLE</u>	<u>RELATIVE FIELD</u>
10	0.834	-26	0.167	-61	0.397
9	0.864	-27	0.124	-62	0.392
8	0.891	-28	0.082	-63	0.386
7	0.916	-29	0.041	-64	0.380
6	0.938	-30	0.000	-65	0.364
5	0.957	-31	0.039	-66	0.356
4	0.972	-32	0.076	-67	0.349
3	0.984	-33	0.112	-68	0.331
2	0.993	-34	0.146	-69	0.323
1	0.998	-35	0.176	-70	0.314
0	1.000	-36	0.207	-71	0.296
-1	0.998	-37	0.236	-72	0.287
-2	0.993	-38	0.259	-73	0.267
-3	0.984	-39	0.285	-74	0.258
-4	0.972	-40	0.308	-75	0.249
-5	0.957	-41	0.330	-76	0.229
-6	0.938	-42	0.350	-77	0.219
-7	0.916	-43	0.363	-78	0.210
-8	0.891	-44	0.379	-79	0.190
-9	0.864	-45	0.394	-80	0.180
-10	0.834	-46	0.407	-81	0.170
-11	0.801	-47	0.419	-82	0.160
-12	0.762	-48	0.429	-83	0.150
-13	0.730	-49	0.438	-84	0.150
-14	0.689	-50	0.445	-85	0.140
-15	0.646	-51	0.444	-86	0.130
-16	0.609	-52	0.448	-87	0.120
-17	0.565	-53	0.444	-88	0.120
-18	0.525	-54	0.446	-89	0.110
-19	0.479	-55	0.438	-90	0.100
-20	0.433	-56	0.438		
-21	0.387	-57	0.428		
-22	0.345	-58	0.426		
-23	0.300	-59	0.414		
-24	0.254	-60	0.411		
-25	0.212				

Customer: Stroh Comm.

Frequency: 101.5 & 107.5 MHz

Model: JCPB-2M
Description: FM Sidemount Antenna
-0° Beam Tilt, 0% Null Fill

Adjacent Channel Study For Station W244CN, Facility_id: 150999

Co-channel through third adjacent:

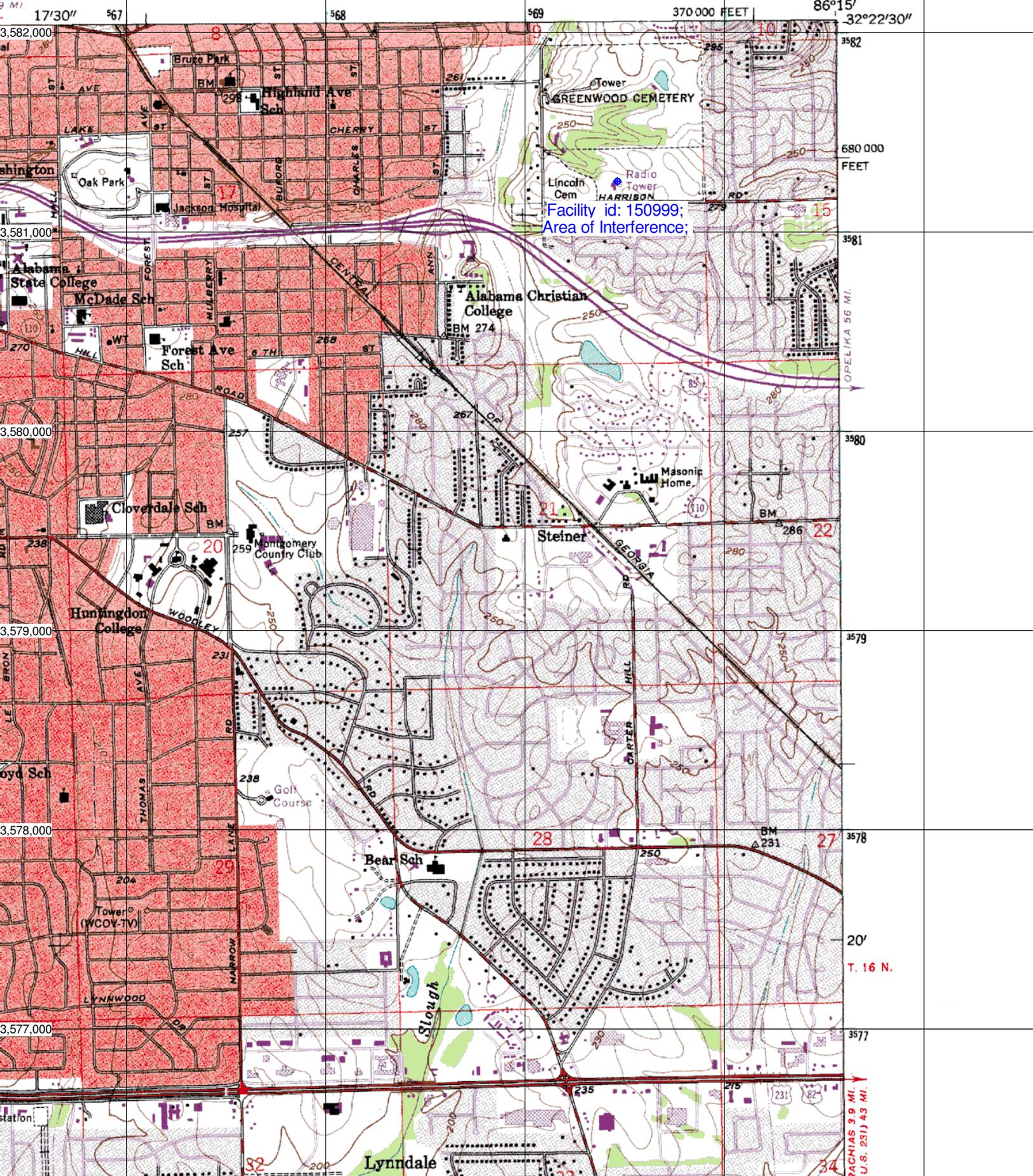
Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
169274	43628	BLH	19920130KA	WQKS-FM	BLUEWATER BROADCASTING COMPANY LLC	A	MONTGOMERY	AL	LIC	0.9	306	241	2	0	1.4918
1311860	8662	BLH	20090512AAA	WWMG	CAPSTAR TX LLC	C3	MILLBROOK	AL	LIC	5.4	273	246	3	4.4	1.4918
175823	48682	BLH	19920803KD	WQSI	NEW WORLD COMMUNICATIONS, INC.	A	TUSKEGEE	AL	LIC	4.3	233	240	3	65.6	0
639259	146669	BNPFT	20030317BXL	NEW	RADIO ASSIST MINISTRY, INC.	D	TROY	AL	APP	0.01	298	243	0	67	0
145506	73194	BMLH	19900228KC	WKXN	AUTAUGAVILLE RADIO, INC.	A	GREENVILLE	AL	LIC	4	192	240	3	68.6	0
1182079	150897	BLFT	20070418ABB	W245AU	FAITH BROADCASTING, INC.	D	THORSBY	AL	LIC	0.019	264	245	2	73.7	0
1340395	150072	BLFT	20091030AAB	W242BW	ALEXANDER BROADCASTING COMPANY, LLC	D	SELMA	AL	LIC	0.21	143	242	1	75.3	0
1250887	146140	BLFT	20080617ACT	W242AX	LAYTON ENVIRONMENTAL ENGINEERING	D	AUBURN	AL	LIC	0.013	249	242	1	76.1	0
638741	146167	BNPFT	20030317CSI	NEW	RADIO ASSIST MINISTRY, INC.	D	LIVERNE	AL	APP	0.01	242.3	242	1	78.1	0
260293	22877	BLH	19980112KC	WMXA	QANTUM OF AUBURN LICENSE COMPANY, LLC	A	OPELIKA	AL	LIC	3.5	316	244	1	86.5	0
1416295	156366	BMPFT	20110204ACK	W241BD	EDUCATIONAL MEDIA FOUNDATION	D	CALERA	AL	CP MOD	0.008	269	241	2	107.8	0
993186	133833	BLL	20040512AET	WRNK-LP	CONTACT MINISTRY CENTER	L1	LANETT	AL	LIC	0	215	242	1	114.9	0
640540	147818	BNPFT	20030317MNH	NEW	CXR HOLDINGS, INC.	D	VANCE	AL	APP	0.05	255	241	2	123.1	0
1127658	76747	BLH	20060414AAT	WKXK	AUTAUGAVILLE RADIO, INC.	C2	PINE HILL	AL	LIC	41	218	244	1	129.3	0
1065233	2111	BXLH	20050527BJG	WMJJ	CAPSTAR TX LLC	C0	BIRMINGHAM	AL	LIC	32	419	243	0	132.8	0
624912	2111	BMLH	20030207AAL	WMJJ	CAPSTAR TX LLC	C0	BIRMINGHAM	AL	LIC	100	494	243	0	132.8	0
1144806	25575	BLH	20060912ABV	WDJR	GULF SOUTH COMMUNICATIONS, INC.	C0	ENTERPRISE	AL	LIC	100	353.9	245	2	168.1	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
----------------	-------------	--------	-----	------	----------	-------	------	-------	--------	-----	--------	---------	-----	------	-----

MONTGOMERY SOUTH QUADRANGLE
 ALABAMA—MONTGOMERY CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 SE/4 MONTGOMERY 15' QUADRANGLE

3788 I
 (MOUNT MEIGS)
 1:82,500



Facility id: 150999;
 Area of Interference;

