

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO DISNEY GROUP, LLC
RADIO STATION WDYZ
ORLANDO, FLORIDA

April 3, 2007

990 KHZ 50 KW-D 14 KW-N U DA-2

ENGINEERING EXHIBIT
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RADIO DISNEY GROUP, LLC
RADIO STATION WXYZ
ORLANDO, FLORIDA

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Engineering Statement

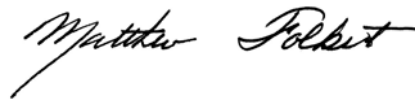
The engineering exhibit of which this statement is part was prepared on behalf of Radio Disney Group, LLC, the licensee of AM broadcast station WDYZ, Orlando, Florida, in support of an application for construction permit to augment the nighttime directional antenna pattern. WDYZ operates on 990 kilohertz, with a daytime power of 50 kilowatts and a nighttime power of 14 kilowatts employing different directional antenna patterns.

After the completion of an evaluation at the station, it was determined that the nighttime directional antenna pattern would require augmentation. The field strength value on one radial was found to be outside the standard pattern authorized by the construction permit. The proposed augmentation is completely consistent with the FCC Rules, as it will provide the requisite levels of protection to all pertinent stations.

The proposed modified nighttime directional antenna pattern is shown in graphical form on Figure 1 and in tabular form on Figure 2. Figure 3 is a nighttime allocation study for the span of augmentation. As will be noted from the field permissibles shown on

Figure 3, the increase in radiation proposed for the WDYZ nighttime pattern will not result in new interference toward any station.

In all respects, the proposed modified standard pattern complies with the requirements of 47CFR73.152.

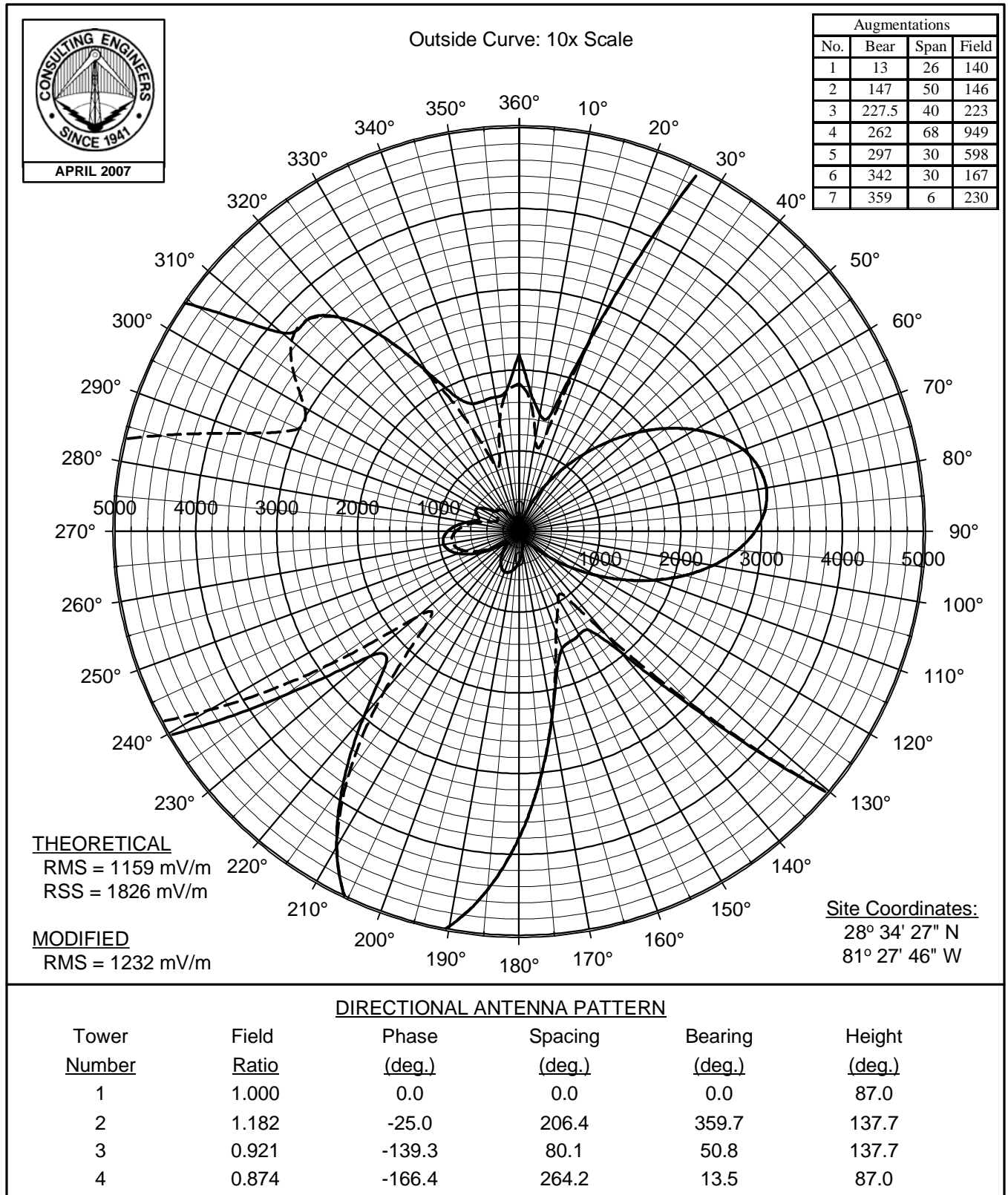
A handwritten signature in black ink, reading "Matthew Folkert". The signature is written in a cursive style with a large, stylized 'M' and 'F'.

Matthew Folkert

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, FL 34237
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April 3, 2007

Figure 1



NIGHTTIME HORIZONTAL PLANE MODIFIED STANDARD RADIATION PATTERN

RADIO STATION WDYZ
ORLANDO, FLORIDA
990 KHZ 50 KW-D, 14 KW-N U DA-2

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

TECHNICAL EXHIBIT
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NIGHTTIME RADIATION PATTERN
(Radiation Values at One Kilometer)

<u>Tower Number</u>	<u>Field Ratio</u>	<u>Phase (deg.)</u>	<u>Spacing (deg.)</u>	<u>Bearing (deg.)</u>	<u>Height (deg.)</u>
1	1.000	0.0	0.0	0.0	87.0
2	1.182	-25.0	206.4	359.7	137.7
3	0.921	-139.3	80.1	50.8	137.7
4	0.874	-166.4	264.2	13.5	87.0

<u>Input Power (kW)</u>	<u>Loop Loss (ohms)</u>	<u>Theo. RMS (mV/m)</u>	<u>Theo. RSS (mV/m)</u>	<u>Q Factor (mV/m)</u>	<u>Modified RMS (mV/m)</u>
14	1.0	1159	1826	45.7	1232

Augmentations

<u>No.</u>	<u>Bear</u>	<u>Span</u>	<u>Field</u>
1	13	26	140
2	147	50	146
3	227.5	40	223
4	262	68	949
5	297	30	598
6	342	30	167
7	359	6	230

Standard Radiation Pattern
(at One Kilometer)

Azimuth Angle (deg)	Elevation Angle in Degrees						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
0	219	201	160	147	220	345	481
5	171	152	111	122	226	364	506
10	147	138	133	184	293	427	564
15	149	157	194	273	386	515	644
20	245	262	315	401	510	630	745
25	428	445	496	575	672	775	871
30	667	682	724	790	868	949	1020
35	944	955	988	1035	1091	1145	1186
40	1251	1258	1277	1305	1334	1357	1364
45	1575	1577	1583	1588	1588	1576	1547
50	1905	1902	1892	1873	1842	1795	1727
55	2224	2215	2190	2147	2085	2001	1896
60	2516	2502	2462	2396	2304	2186	2044
65	2764	2746	2693	2605	2485	2336	2162
70	2953	2931	2867	2761	2618	2444	2243
75	3070	3045	2972	2853	2693	2499	2279
80	3105	3079	3000	2873	2703	2498	2268
85	3055	3028	2947	2817	2645	2438	2206
90	2920	2893	2815	2689	2521	2321	2096
95	2709	2684	2611	2493	2338	2151	1943
100	2434	2412	2347	2243	2104	1939	1754
105	2113	2094	2040	1952	1835	1695	1537
110	1766	1751	1708	1638	1545	1432	1306
115	1414	1403	1371	1319	1250	1166	1070
120	1077	1069	1048	1013	966	908	841
125	772	768	755	734	706	670	628
130	515	513	506	496	482	464	442
135	317	317	314	310	305	298	290
140	194	193	191	187	184	180	178
145	149	147	142	135	127	120	115
150	148	145	139	130	119	108	100
155	150	147	140	129	117	108	101
160	155	151	140	124	108	97.8	95.5
165	180	174	156	130	102	81.4	79.8
170	234	226	201	163	117	75.6	61.1
175	306	295	264	215	156	93.7	52.8

Standard Radiation Pattern
(at One Kilometer)

Azimuth Angle (deg)	Elevation Angle in Degrees						
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)	65 (mV/m)
0	605	700	757	769	737	664	559
5	632	728	784	795	759	682	573
10	685	775	825	829	786	703	588
15	754	834	874	868	816	725	603
20	841	906	931	911	847	746	616
25	947	991	997	959	881	768	629
30	1070	1089	1070	1012	917	790	642
35	1205	1194	1149	1067	952	811	653
40	1349	1305	1229	1122	987	830	662
45	1494	1415	1308	1174	1018	847	669
50	1636	1521	1382	1222	1046	860	673
55	1767	1617	1447	1262	1066	868	674
60	1879	1696	1499	1291	1079	870	670
65	1967	1755	1533	1307	1083	866	663
70	2022	1788	1548	1308	1075	854	650
75	2041	1792	1540	1293	1056	835	633
80	2020	1764	1508	1260	1025	807	612
85	1959	1704	1452	1209	981	772	585
90	1858	1614	1373	1143	927	730	555
95	1722	1496	1274	1061	862	681	520
100	1557	1355	1157	967	789	627	482
105	1370	1198	1027	863	710	569	442
110	1170	1029	890	754	626	508	400
115	966	858	749	643	541	446	357
120	767	690	611	533	456	383	314
125	582	532	480	427	375	323	272
130	417	390	361	331	299	267	233
135	280	270	258	246	232	216	196
140	176	176	176	176	174	171	163
145	114	115	118	123	129	133	135
150	94.7	92.0	91.6	93.3	97.4	104	110
155	97.7	95.1	91.4	86.4	82.5	83.2	89.1
160	99.2	103	102	94.4	82.8	73.7	73.7
165	93.0	107	113	108	92.9	74.9	65.0
170	82.1	108	123	122	107	84.0	64.0
175	71.6	108	131	136	123	96.8	69.2

Standard Radiation Pattern
(at One Kilometer)

Azimuth Angle (deg)	Elevation Angle in Degrees						
	0 (mV/m)	5 (mV/m)	10 (mV/m)	15 (mV/m)	20 (mV/m)	25 (mV/m)	30 (mV/m)
180	379	367	329	272	200	122	55.5
185	446	431	389	323	240	150	65.8
190	497	481	434	362	271	171	75.4
195	526	509	460	383	286	180	78.3
200	530	513	462	382	282	174	72.3
205	505	488	436	357	258	152	60.8
210	451	434	385	309	216	120	66.6
215	378	363	319	253	177	119	122
220	297	285	252	207	168	162	191
225	233	227	213	202	206	228	261
230	240	241	247	260	281	306	330
235	353	356	364	376	391	403	409
240	509	510	512	513	512	505	490
245	666	664	658	646	627	600	564
250	802	797	782	757	722	677	622
255	897	890	868	832	784	724	655
260	945	935	908	864	805	735	657
265	940	929	899	850	786	710	628
270	884	873	841	791	726	651	571
275	784	773	743	695	633	564	492
280	652	643	615	572	519	461	403
285	531	523	502	468	429	388	352
290	538	533	519	498	475	452	432
295	591	588	579	567	554	541	528
300	581	580	577	574	571	568	564
305	486	488	493	502	515	528	540
310	383	388	404	429	460	492	521
315	371	378	399	431	471	513	550
320	346	355	380	420	469	520	567
325	295	305	336	385	444	508	567
330	229	242	277	334	404	481	555
335	184	194	228	286	364	452	538
340	168	172	192	242	323	419	517
345	167	162	160	195	276	382	493
350	169	155	127	140	225	345	469
355	176	156	107	94.0	189	322	459

Standard Radiation Pattern
(at One Kilometer)

Azimuth Angle (deg)	Elevation Angle in Degrees						
	35 (mV/m)	40 (mV/m)	45 (mV/m)	50 (mV/m)	55 (mV/m)	60 (mV/m)	65 (mV/m)
180	60.0	106	138	148	136	109	76.4
185	50.4	104	143	158	148	120	83.9
190	45.5	105	149	167	159	130	91.0
195	47.3	111	158	178	169	139	97.3
200	57.6	124	171	189	179	147	103
205	78.3	143	187	202	189	153	107
210	113	172	208	217	198	159	111
215	169	214	239	237	212	168	117
220	231	261	272	259	225	177	123
225	290	306	302	277	235	181	126
230	344	344	325	289	239	181	125
235	404	384	350	302	244	182	127
240	464	425	375	316	251	188	135
245	518	462	398	330	261	198	148
250	559	489	415	341	270	210	163
255	579	499	419	343	275	218	176
260	574	490	409	335	273	223	186
265	543	461	384	318	264	223	192
270	490	415	349	295	253	221	196
275	422	361	311	272	244	221	200
280	352	310	280	259	243	227	208
285	324	305	292	282	270	252	228
290	416	402	388	370	346	315	277
295	515	500	479	452	417	373	322
300	557	545	524	494	453	403	345
305	547	545	530	503	463	411	350
310	541	549	542	518	477	423	358
315	577	589	583	558	514	455	383
320	603	621	620	595	550	486	408
325	614	642	647	626	581	514	431
330	615	654	667	652	608	540	453
335	611	662	684	675	634	565	475
340	603	666	698	695	657	588	494
345	592	666	708	711	676	607	512
350	581	667	717	726	694	625	527
355	581	675	731	744	713	643	542

Figure 3

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ORLANDO, FLORIDA

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Nighttime Allocation Study

Call: WDYZ
Freq: 990 kHz
ORLANDO, FL, US
Lat: 28-34-27 N
Lng: 081-27-46 W
Power: 14.0 kW
Theo RMS: 1159 mV/m @ 1km
of Augmentations: 7

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swch	TL Swch	A (deg)	B (deg)	C (deg)	D (deg)
--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1	1.000	0.0	0.0	0.0	87.0	0	0	0.0	0.0	0.0	0.0
2	1.182	-25.0	206.4	359.7	137.7	0	0	0.0	0.0	0.0	0.0
3	0.921	-139.3	80.1	50.8	137.7	0	0	0.0	0.0	0.0	0.0
4	0.874	-166.4	264.2	13.5	87.0	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct	St	City	Azi (deg)	Ang Low (deg)	Ang High (deg)	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
TGAL-D (285)	GT		PERLADEORIEN	212.68	2.24	2.24	6.22	0.50	413.73E	412.87	0.86
XEUM/A	MX	YC	VALLADOLID	219.30	7.28	7.28	53.50	4.14	387.28	282.05	105.22
XE/A	MX	MC	TACAMBARO	247.29	0.00	0.00	7.16	2.91	2033.37	732.12	1301.25
XEOL/O	MX	PU	TEZIUTLAN	242.37	1.57	1.57	12.60	5.40	2140.87	584.81	1556.05
XEOL1/O	MX	PU	TEZIUTLAN	242.37	1.56	1.56	12.58	5.40	2146.40	584.88	1561.53
XEIU/A	MX	OA	OAXACA	233.94	0.87	0.87	10.09	5.38	2667.14	323.55	2343.59
XEIU1/A	MX	OA	OAXACA	233.94	0.87	0.87	10.09	5.38	2667.14	323.55	2343.59