

MINOR CHANGE APPLICATION /
CHANGE CITY OF LICENSE
OLIVET NAZARENE UNIVERSITY
WTMK RADIO STATION
CH 203A - 88.5 MHZ - 4.0 KW DA
WANATAH, INDIANA
October 2011

EXHIBIT A

Non-Commercial Allocation Analysis & Section 73.509 Study

Because of its operating channel, the proposed WTMK facility at Warsaw, Indiana could potentially impact other authorized or proposed non-commercial stations operating on co- or adjacent FM channels. The detailed list of stations reviewed as potentially impacted by Channel 203A at Warsaw, Indiana is shown on Exhibit A1.¹ The three closest (nearby) stations reviewed are WDSO, Channel 202A, Chesterton, Indiana; WHFH, Channel 203A, Flossmoor, Illinois; and WQKV on Channel 204A at Rochester, Indiana.² The provisions of §73.509 of the rules will be met by specifying less than maximum Class A facilities and using a directional antenna system.

Compliance with §73.509

Exhibit A2 specifically demonstrates that there will be no interference delivered from the proposed WTMK to the authorized WDSO, WHFH or proposed WQKV. Attached as Exhibits A3 and A8 are the tabulated distances to the protected and interfering contours, along pertinent arcs, of the respective facilities. Attached as Exhibit A9 is a tabulation of the protected and interfering contours of the proposed WTMK, in ten degree increments.

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- 1) A contingent application to change WQKV, Channel 203A, Rochester, Indiana to Channel 204A at Rochester is being submitted. Therefore, the licensed WQKV facility is not considered.
 - 2) The remaining stations are sufficiently removed from the proposed WTMK for there to be no contour overlap.

§73.207 Spacing Matters, Including I.F. Relationship

The nearest station operating on a frequency either 53 or 54 channels removed from this instant proposal is the transmitter site for station WKVI-FM, Channel 257A, Knox, Indiana. The WKVI-FM site is located on a bearing of 86.6° at a distance of 35.3 kilometers from the proposed WTMK site. Pursuant to §73.207 of the rules, WTMK must be a minimum of 10.0 kilometers from the WKVI -FM site. The proposed WTMK site is located more than 25.0 kilometers farther than the required distance. Therefore, this proposal does not impact any intermediate frequency stations.

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EXHIBIT A1

Interference Review for WTMK Wanatah, Indiana
Using Proposed Site as Reference

REFERENCE	CH# 203A - 88.5 MHZ, Pwr= 4 kW DA, HAAT= 102.9 M, COR= 310.6 M	DISPLAY DATES
41 18 15.0 N.	Average Protected F(50-50)= 26.2 km	DATA 10-21-11
87 01 30.0 W.	Standard Directional	SEARCH 10-21-11

CH CITY	CALL	TYPE STATE	ANT	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
203A Lowell	WTMK	LIC IN	DCX	207.8 27.7	27.8 BLED20051212ACI	41 04 59.0 87 10 47.0	1.500 51	51.5 260	14.1 Olivet Nazarene University	-47.9*	-61.1
202A Chesterton	WDSO	LIC IN	CX	355.0 175.0	33.9 BMLD20050107ABH	41 36 29.0 87 03 37.0	0.400 41	11.4 241	8.0 Duneland School Corp.	5.1	0.2
203A Flossmoor	WHFH	LIC IL	DHN	296.0 115.5	61.8 BLED19800513AE	41 32 43.0 87 41 30.0	1.500 28	49.0 236	13.1 Community High School Dist	0.2<	5.3
204A Gary	WGVE-FM	LIC IN	HN	318.8 138.6	37.0 BLED714	41 33 15.0 87 19 05.0	2.100 28	17.6 219	12.1 Gary Community School Corp	6.0	4.9
206A Lowell	WLPR-FM	LIC IN	CX	274.5 94.3	27.8 BLED20060420AAX	41 19 24.0 87 21 22.0	2.400 77	1.9 288	20.0 Northwest Indiana Public B	13.0	6.7
203B1 Constantine	NEW	CP MI	DCX	59.5 240.4	130.9 BNPED20071016AAZ	41 53 37.0 85 39 53.0	9.700 89	88.1 343	27.5 Christian Radio Friends, I	16.9	23.0
* 204A Rochester	WQKV	LIC IN	CX	113.5 294.0	69.2 BLED20060803AHY	41 03 14.0 86 16 12.0	0.250 52	13.9 289	10.0 Educational Media Foundation	28.6	18.3
203A Chicago	WHPK-FM	LIC IL	CN	319.0 138.6	72.5 BLED19850611KC	41 47 40.0 87 35 55.0	0.100 37	22.6 220	6.7 University Of Chicago	36.5	19.6
202A Kankakee	WAWF	LIC IL	C	247.9 67.4	66.3 BLED20000512AAE	41 04 39.0 87 45 22.0	1.250 87	26.9 279	18.3 Family Worship Center Church	24.1	24.9
257A Knox	WKVI-FM	LIC IN	CN	86.6 266.9	35.3 BMLH19910401KB	41 19 20.0 86 36 17.0	3.300 91	10.2 306	47.6 Kankakee Valley B/cing. Co	10.0R	25.3M
201B Elkhart	WVPE	LIC IN	DCX	63.4 244.0	77.9 BLED20081222ABZ	41 36 49.0 86 11 20.0	11.500 304	5.0 547	49.9 Elkhart Community Schools	46.8	25.5
204A Warsaw	WQKV	CP IN	CX	104.8 285.5	98.1 BPED20100622ADM	41 04 26.0 85 53 46.0	4.500 90	35.9 348	23.7 Educational Media Foundation	35.5	33.5
203A Cole	WHUZ	LIC IN	C	127.2 308.1	133.3 BLED20110726AGB	40 34 20.6 85 46 11.5	2.700 28	54.5 278	13.8 Hoosier Public Radio Corp.	52.1	38.0
204A Kankakee	WEGN	LIC IL	DCX	262.6 81.9	80.1 BLED20110803ABK	41 12 26.5 87 58 21.6	5.000 65	28.4 256	19.4 The Power Foundation	38.5	41.0

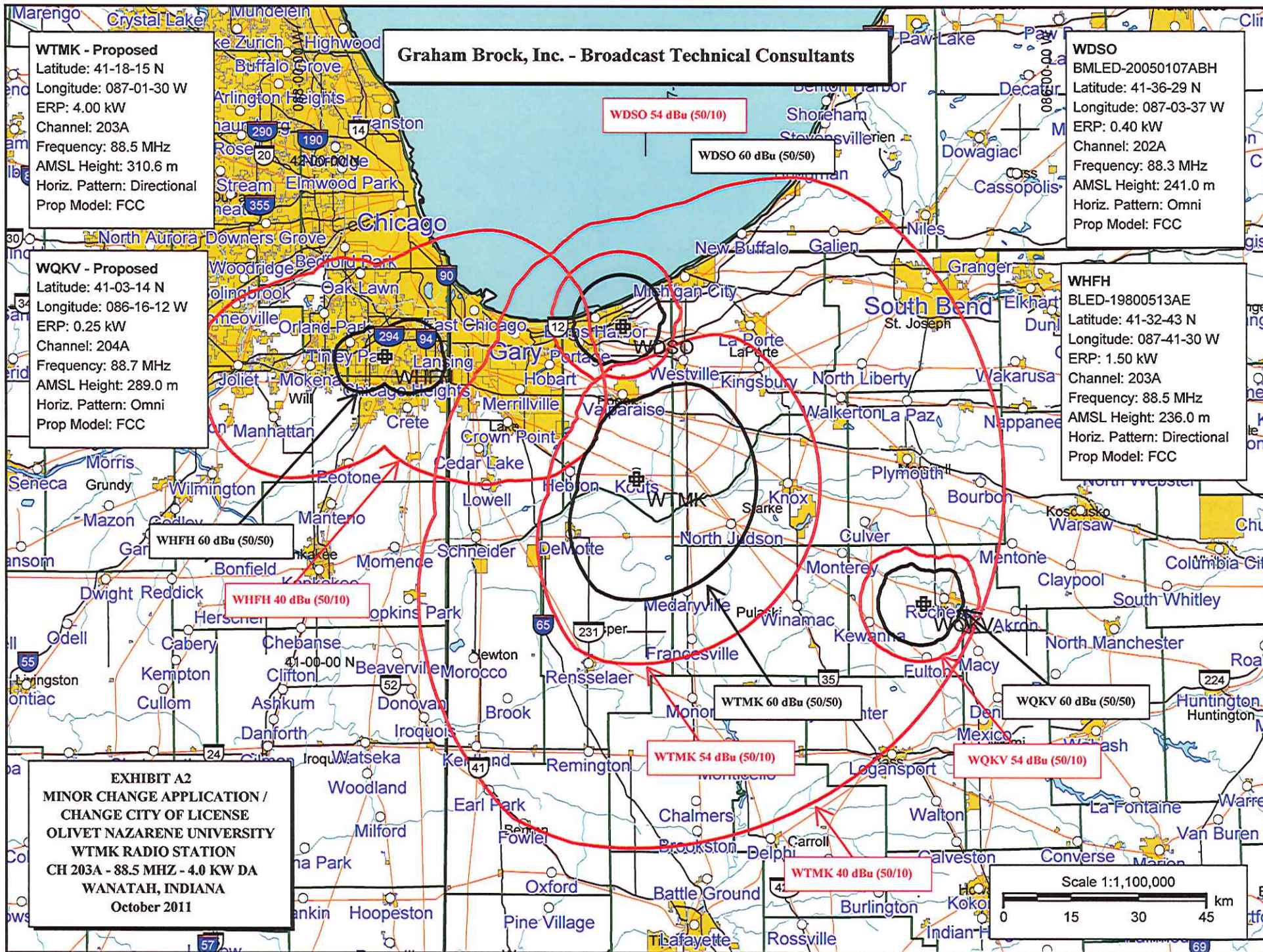
Terrain database is USGS 03 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference Zone= - Zone 1, Co to 3rd
adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt (Y,N,X)
***affixed to 'IN' or 'OUT' values = site inside protected contour.

< = Station meets FCC minimum distance spacing for its class.

< = Contour Overlap

* Note: WQKV moves to Channel 204A in a contingent application.



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EXHIBIT A3

WTMK - Proposed
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

WDSO - BMLED-20050107ABH
Channel = 202A
Max ERP = 0.4 kW
RCAMSL = 241 M
N. Lat = 41 36 29
W. Lng = 87 03 37

Protected
60 dBu

Interfering
54 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
348.0	000.7957	0097.3	017.2	182.1	000.4000	0009.6	016.9	47.4
349.0	000.8300	0096.3	017.3	181.2	000.4000	0008.8	016.8	47.5
350.0	000.8651	0094.8	017.4	180.2	000.4000	0007.9	016.7	47.6
351.0	000.8744	0094.0	017.3	179.2	000.4000	0006.9	016.6	47.6
352.0	000.8838	0093.2	017.3	178.2	000.4000	0005.6	016.6	47.6
353.0	000.8932	0093.0	017.3	177.1	000.4000	0004.7	016.6	47.7
354.0	000.9026	0092.8	017.3	176.1	000.4000	0004.6	016.5	47.7
355.0	000.9121	0092.8	017.4	175.0	000.4000	0005.0	016.5	47.8
356.0	000.9217	0092.3	017.4	174.0	000.4000	0005.2	016.5	47.8
357.0	000.9313	0091.8	017.4	172.9	000.4000	0004.9	016.5	47.7
358.0	000.9409	0091.4	017.4	171.9	000.4000	0004.0	016.5	47.7
359.0	000.9506	0091.2	017.4	170.8	000.4000	0002.6	016.5	47.7
000.0	000.9604	0091.7	017.5	169.7	000.4000	0000.8	016.5	47.8
001.0	000.9960	0092.2	017.7	168.5	000.4000	0000.1	016.3	47.9
002.0	001.0323	0092.2	017.9	167.3	000.4000	-0001.3	016.2	48.0
003.0	001.0692	0091.9	018.1	166.1	000.4000	-0001.5	016.2	48.0
004.0	001.1067	0091.6	018.2	164.9	000.4000	-0001.5	016.2	48.0
005.0	001.1449	0091.3	018.3	163.7	000.4000	-0001.1	016.1	48.1
006.0	001.1837	0091.3	018.5	162.4	000.4000	0000.1	016.1	48.1
007.0	001.2232	0091.2	018.6	161.2	000.4000	0001.0	016.1	48.1
008.0	001.2634	0091.2	018.8	159.9	000.4000	0001.8	016.1	48.1
009.0	001.3042	0091.2	018.9	158.6	000.4000	0003.0	016.2	48.0
010.0	001.3456	0091.2	019.1	157.3	000.4000	0004.7	016.2	48.0
011.0	001.4158	0091.5	019.4	155.8	000.4000	0005.4	016.2	48.0
012.0	001.4879	0092.0	019.7	154.2	000.4000	0007.6	016.1	48.1
013.0	001.5617	0092.6	020.0	152.5	000.4000	0009.0	016.1	48.1
014.0	001.6373	0093.3	020.3	150.9	000.4000	0013.2	016.1	48.1
015.0	001.7147	0094.1	020.6	149.2	000.4000	0016.4	016.1	48.1
016.0	001.7939	0094.9	020.9	147.5	000.4000	0017.3	016.2	48.0
017.0	001.8748	0095.3	021.2	145.9	000.4000	0016.2	016.3	47.9
018.0	001.9576	0095.7	021.5	144.4	000.4000	0014.9	016.4	47.8
019.0	002.0421	0096.1	021.7	142.9	000.4000	0013.0	016.6	47.7
020.0	002.1284	0096.4	022.0	141.4	000.4000	0009.1	016.8	47.5
021.0	002.2394	0096.6	022.3	139.9	000.4000	0007.8	016.9	47.4
022.0	002.3533	0096.8	022.5	138.5	000.4000	0006.1	017.2	47.2
023.0	002.4699	0096.6	022.8	137.2	000.4000	0005.2	017.4	47.0
024.0	002.5894	0096.5	023.0	136.0	000.4000	0004.9	017.7	46.7

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EXHIBIT A4

WDSO - BMLED-20050107ABH
Channel = 202A
Max ERP = 0.4 kW
RCAMSL = 241 M
N. Lat = 41 36 29
W. Lng = 87 03 37

WTMK - BLED-20051212ACI
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

Protected
60 dBu

Interfering
54 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
146.0	000.4000	0016.2	008.0	003.2	001.0765	0091.9	027.2	53.7
147.0	000.4000	0017.3	008.0	003.0	001.0677	0091.9	027.1	53.7
148.0	000.4000	0017.2	008.0	002.7	001.0588	0091.9	027.0	53.7
149.0	000.4000	0016.4	008.0	002.5	001.0497	0092.2	026.9	53.7
150.0	000.4000	0015.0	008.0	002.2	001.0406	0092.2	026.8	53.8
151.0	000.4000	0013.2	008.0	002.0	001.0313	0092.2	026.8	53.8
152.0	000.4000	0011.2	008.0	001.7	001.0220	0092.2	026.7	53.8
153.0	000.4000	0009.0	008.0	001.5	001.0125	0092.2	026.6	53.8
154.0	000.4000	0007.6	008.0	001.2	001.0030	0092.2	026.6	53.8
155.0	000.4000	0006.5	008.0	000.9	000.9933	0092.2	026.5	53.8
156.0	000.4000	0005.4	008.0	000.7	000.9836	0092.2	026.4	53.8
157.0	000.4000	0004.7	008.0	000.4	000.9738	0091.7	026.4	53.7
158.0	000.4000	0004.0	008.0	000.1	000.9640	0091.7	026.3	53.7
159.0	000.4000	0003.0	008.0	359.8	000.9586	0091.7	026.3	53.7
160.0	000.4000	0001.8	008.0	359.5	000.9559	0091.7	026.2	53.7
161.0	000.4000	0001.0	008.0	359.2	000.9531	0091.2	026.2	53.7
162.0	000.4000	0000.1	008.0	359.0	000.9502	0091.2	026.1	53.7
163.0	000.4000	-0000.6	008.0	358.7	000.9474	0091.2	026.1	53.7
164.0	000.4000	-0001.1	008.0	358.4	000.9445	0091.4	026.1	53.8
165.0	000.4000	-0001.5	008.0	358.1	000.9417	0091.4	026.0	53.8
166.0	000.4000	-0001.5	008.0	357.8	000.9388	0091.4	026.0	53.8
167.0	000.4000	-0001.3	008.0	357.5	000.9359	0091.8	026.0	53.8
168.0	000.4000	-0000.6	008.0	357.2	000.9330	0091.8	026.0	53.8
169.0	000.4000	0000.1	008.0	356.9	000.9300	0091.8	025.9	53.8
170.0	000.4000	0000.8	008.0	356.6	000.9271	0091.8	025.9	53.8
171.0	000.4000	0002.6	008.0	356.3	000.9242	0092.3	025.9	53.9
172.0	000.4000	0004.0	008.0	356.0	000.9213	0092.3	025.9	53.9
173.0	000.4000	0004.9	008.0	355.6	000.9183	0092.3	025.9	53.9
174.0	000.4000	0005.2	008.0	355.3	000.9154	0092.8	025.9	53.9
175.0	000.4000	0005.0	008.0	355.0	000.9125	0092.8	025.9	53.9
176.0	000.4000	0004.6	008.0	354.7	000.9095	0092.8	025.9	53.9
177.0	000.4000	0004.7	008.0	354.4	000.9066	0092.8	025.9	53.9
178.0	000.4000	0005.6	008.0	354.1	000.9037	0092.8	025.9	53.8
179.0	000.4000	0006.9	008.0	353.8	000.9008	0092.8	025.9	53.8
180.0	000.4000	0007.9	008.0	353.5	000.8979	0092.8	025.9	53.8
181.0	000.4000	0008.8	008.0	353.2	000.8950	0093.0	025.9	53.8
182.0	000.4000	0009.6	008.0	352.9	000.8922	0093.0	026.0	53.8

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EXHIBIT A5

WTMK - Proposed
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

WHFH - BLED-19800513AE
Channel = 203A
Max ERP = 1.5 kW
RCAMSL = 236 M
N. Lat = 41 32 43
W. Lng = 87 41 30

Protected
60 dBu

Interfering
40 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
281.0	000.2304	0102.3	012.8	119.3	001.4990	0040.2	049.6	39.5
282.0	000.2304	0102.1	012.7	119.1	001.4986	0040.2	049.5	39.5
283.0	000.2304	0101.8	012.7	118.8	001.4982	0040.2	049.5	39.5
284.0	000.2304	0101.7	012.7	118.6	001.4979	0040.2	049.4	39.5
285.0	000.2304	0101.3	012.7	118.3	001.4975	0040.9	049.4	39.7
286.0	000.2304	0100.8	012.7	118.1	001.4971	0040.9	049.4	39.7
287.0	000.2304	0100.4	012.6	117.8	001.4967	0040.9	049.4	39.7
288.0	000.2304	0100.2	012.6	117.5	001.4963	0040.9	049.3	39.7
289.0	000.2304	0100.2	012.6	117.3	001.4959	0041.7	049.3	39.8
290.0	000.2304	0100.3	012.6	117.0	001.4956	0041.7	049.3	39.8
291.0	000.2304	0100.3	012.6	116.8	001.4952	0041.7	049.2	39.8
292.0	000.2304	0100.2	012.6	116.5	001.4948	0041.7	049.2	39.8
293.0	000.2304	0100.2	012.6	116.3	001.4944	0042.3	049.2	39.9
294.0	000.2304	0100.2	012.6	116.0	001.4940	0042.3	049.2	39.9
295.0	000.2304	0100.2	012.6	115.8	001.4936	0042.3	049.2	39.9
296.0	000.2304	0100.0	012.6	115.5	001.4933	0042.9	049.2	40.0
297.0	000.2304	0099.3	012.6	115.2	001.4929	0042.9	049.2	40.0
298.0	000.2304	0098.6	012.5	115.0	001.4925	0042.9	049.3	40.0
299.0	000.2304	0097.9	012.5	114.7	001.4921	0042.9	049.4	40.0
300.0	000.2304	0097.5	012.5	114.5	001.4917	0043.4	049.4	40.0
301.0	000.2314	0096.9	012.4	114.2	001.4914	0043.4	049.4	40.0
302.0	000.2323	0096.4	012.4	114.0	001.4910	0043.4	049.5	40.0
303.0	000.2333	0095.7	012.4	113.8	001.4906	0043.4	049.6	40.0
304.0	000.2343	0094.8	012.3	113.5	001.4903	0043.4	049.6	40.0
305.0	000.2352	0094.0	012.3	113.3	001.4899	0043.7	049.7	40.0
306.0	000.2362	0093.2	012.3	113.0	001.4896	0043.7	049.8	40.0
307.0	000.2372	0093.2	012.3	112.8	001.4892	0043.7	049.8	39.9
308.0	000.2381	0093.7	012.3	112.5	001.4888	0043.7	049.8	39.9
309.0	000.2391	0094.7	012.4	112.3	001.4884	0043.8	049.8	40.0
310.0	000.2401	0096.0	012.5	112.0	001.4880	0043.8	049.8	40.0
311.0	000.2490	0097.8	012.7	111.7	001.4876	0043.8	049.7	40.0
312.0	000.2581	0098.4	012.9	111.4	001.4871	0043.9	049.6	40.0
313.0	000.2673	0097.6	012.9	111.1	001.4867	0043.9	049.6	40.0
314.0	000.2767	0096.3	012.9	110.9	001.4863	0043.9	049.7	40.0

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EXHIBIT A5 (continued)

WTMK - Proposed
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

WHFH - BLED-19800513AE
Channel = 203A
Max ERP = 1.5 kW
RCAMSL = 236 M
N. Lat = 41 32 43
W. Lng = 87 41 30

Protected
60 dBu

Interfering
40 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
315.0	000.2862	0095.5	013.0	110.6	001.4859	0043.9	049.7	40.0
316.0	000.2959	0095.2	013.1	110.3	001.4855	0044.1	049.7	40.0
317.0	000.3058	0095.2	013.2	110.0	001.4851	0044.1	049.7	40.0
318.0	000.3158	0095.1	013.3	109.7	001.4808	0044.1	049.8	40.0
319.0	000.3260	0095.0	013.4	109.5	001.4761	0044.3	049.8	40.0
320.0	000.3364	0095.0	013.5	109.2	001.4713	0044.3	049.8	40.0
321.0	000.3481	0095.0	013.6	108.9	001.4663	0044.3	049.8	40.0
322.0	000.3600	0094.9	013.7	108.6	001.4615	0044.3	049.9	39.9
323.0	000.3721	0094.9	013.8	108.3	001.4566	0044.5	049.9	40.0
324.0	000.3844	0095.3	014.0	107.9	001.4513	0044.5	049.9	39.9
325.0	000.3969	0096.4	014.2	107.6	001.4455	0044.5	049.9	39.9
326.0	000.4096	0097.4	014.3	107.2	001.4397	0044.8	049.9	39.9
327.0	000.4225	0098.6	014.6	106.8	001.4335	0044.8	049.9	39.9
328.0	000.4356	0098.7	014.7	106.5	001.4285	0044.8	050.0	39.9
329.0	000.4489	0098.2	014.8	106.2	001.4239	0045.0	050.1	39.9
330.0	000.4624	0098.2	014.9	105.9	001.4190	0045.0	050.2	39.8
331.0	000.4705	0098.5	015.0	105.6	001.4145	0045.0	050.3	39.8
332.0	000.4788	0099.1	015.1	105.3	001.4094	0045.5	050.4	39.8
333.0	000.4871	0100.2	015.3	105.0	001.4040	0045.5	050.5	39.8
334.0	000.4954	0101.3	015.4	104.6	001.3985	0045.5	050.6	39.7
335.0	000.5039	0101.7	015.5	104.4	001.3939	0045.9	050.7	39.7
336.0	000.5124	0101.3	015.6	104.1	001.3903	0045.9	050.9	39.7
337.0	000.5209	0101.1	015.6	103.9	001.3865	0045.9	051.1	39.6
338.0	000.5296	0101.1	015.7	103.6	001.3826	0045.9	051.3	39.6
339.0	000.5383	0101.6	015.8	103.4	001.3780	0046.6	051.4	39.6
340.0	000.5471	0101.5	015.9	103.1	001.3743	0046.6	051.6	39.5
341.0	000.5756	0101.3	016.1	102.8	001.3686	0046.6	051.7	39.5
342.0	000.6049	0101.0	016.3	102.4	001.3629	0046.9	051.9	39.5
343.0	000.6349	0100.5	016.5	102.1	001.3578	0046.9	052.0	39.4
344.0	000.6656	0099.3	016.6	101.8	001.3538	0046.9	052.2	39.3
345.0	000.6970	0099.1	016.8	101.5	001.3484	0047.2	052.4	39.3
346.0	000.7292	0098.8	017.0	101.2	001.3433	0047.2	052.6	39.2

MINOR CHANGE APPLICATION /
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OLIVET NAZARENE UNIVERSITY
WTMK RADIO STATION
CH 203A - 88.5 MHZ - 4.0 KW DA
WANATAH, INDIANA
October 2011

EXHIBIT A6

WHFH - BLED-19800513AE
Channel = 203A
Max ERP = 1.5 kW
RCAMSL = 236 M
N. Lat = 41 32 43
W. Lng = 87 41 30

WTMK - Proposed
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

Protected
60 dBu

Interfering
40 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
092.0	001.0889	0049.7	013.2	302.0	000.2323	0096.4	050.0	37.2
093.0	001.1172	0049.3	013.2	301.8	000.2321	0096.4	049.9	37.2
094.0	001.1458	0049.1	013.3	301.6	000.2319	0096.4	049.7	37.3
095.0	001.1748	0048.8	013.3	301.4	000.2317	0096.9	049.6	37.4
096.0	001.2042	0048.6	013.4	301.1	000.2315	0096.9	049.5	37.4
097.0	001.2340	0048.2	013.4	300.9	000.2313	0096.9	049.3	37.5
098.0	001.2641	0047.8	013.4	300.7	000.2310	0096.9	049.2	37.5
099.0	001.2946	0047.6	013.4	300.4	000.2308	0097.5	049.1	37.6
100.0	001.3254	0047.4	013.5	300.2	000.2306	0097.5	049.0	37.6
101.0	001.3410	0047.2	013.5	299.9	000.2304	0097.5	048.9	37.7
102.0	001.3566	0046.9	013.5	299.7	000.2304	0097.5	048.8	37.7
103.0	001.3723	0046.6	013.5	299.4	000.2304	0097.9	048.8	37.7
104.0	001.3882	0045.9	013.4	299.1	000.2304	0097.9	048.8	37.7
105.0	001.4041	0045.5	013.4	298.8	000.2304	0097.9	048.7	37.8
106.0	001.4201	0045.0	013.4	298.6	000.2304	0097.9	048.7	37.8
107.0	001.4362	0044.8	013.4	298.3	000.2304	0098.6	048.7	37.8
108.0	001.4524	0044.5	013.4	298.0	000.2304	0098.6	048.6	37.8
109.0	001.4687	0044.3	013.4	297.7	000.2304	0098.6	048.6	37.9
110.0	001.4850	0044.1	013.4	297.5	000.2304	0099.3	048.6	37.9
111.0	001.4865	0043.9	013.3	297.2	000.2304	0099.3	048.6	37.9
112.0	001.4880	0043.8	013.3	296.9	000.2304	0099.3	048.5	37.9
113.0	001.4895	0043.7	013.3	296.6	000.2304	0099.3	048.6	37.9
114.0	001.4910	0043.4	013.3	296.4	000.2304	0100.0	048.6	38.0
115.0	001.4925	0042.9	013.2	296.1	000.2304	0100.0	048.7	37.9
116.0	001.4940	0042.3	013.1	295.8	000.2304	0100.0	048.7	37.9
117.0	001.4955	0041.7	013.0	295.6	000.2304	0100.0	048.8	37.9
118.0	001.4970	0040.9	012.9	295.3	000.2304	0100.2	049.0	37.8
119.0	001.4985	0040.2	012.8	295.0	000.2304	0100.2	049.1	37.8
120.0	001.5000	0039.6	012.7	294.8	000.2304	0100.2	049.2	37.8
121.0	001.5000	0039.1	012.6	294.5	000.2304	0100.2	049.3	37.7
122.0	001.5000	0038.5	012.5	294.3	000.2304	0100.2	049.4	37.7
123.0	001.5000	0038.1	012.5	294.1	000.2304	0100.2	049.5	37.6
124.0	001.5000	0037.5	012.4	293.8	000.2304	0100.2	049.6	37.6
125.0	001.4850	0037.0	012.3	293.6	000.2304	0100.2	049.8	37.5
126.0	001.4702	0036.4	012.1	293.4	000.2304	0100.2	050.0	37.5
127.0	001.4553	0035.5	012.0	293.2	000.2304	0100.2	050.2	37.4
128.0	001.4406	0034.5	011.8	293.0	000.2304	0100.2	050.4	37.3

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WTMK RADIO STATION
CH 203A - 88.5 MHZ - 4.0 KW DA
WANATAH, INDIANA
October 2011

EXHIBIT A7

WTMK - Proposed
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

WQKV - Proposed
Channel = 204A
Max ERP = 0.25 kW
RCAMSL = 289 M
N. Lat = 41 03 14
W. Lng = 86 16 12

Protected
60 dBu

Interfering
54 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
093.0	004.0000	0106.0	026.5	305.9	000.2500	0061.5	045.3	35.9
094.0	004.0000	0106.1	026.6	305.4	000.2500	0060.5	045.1	35.9
095.0	004.0000	0106.1	026.6	304.9	000.2500	0060.5	044.8	36.0
096.0	004.0000	0106.3	026.6	304.4	000.2500	0059.9	044.6	36.0
097.0	004.0000	0106.5	026.6	303.8	000.2500	0059.9	044.4	36.1
098.0	004.0000	0106.5	026.6	303.3	000.2500	0059.4	044.2	36.1
099.0	004.0000	0106.7	026.6	302.8	000.2500	0059.4	044.0	36.1
100.0	004.0000	0106.8	026.6	302.2	000.2500	0059.3	043.8	36.2
101.0	004.0000	0106.8	026.6	301.6	000.2500	0059.3	043.6	36.3
102.0	004.0000	0107.0	026.7	301.1	000.2500	0058.5	043.4	36.2
103.0	004.0000	0107.2	026.7	300.5	000.2500	0057.9	043.3	36.2
104.0	004.0000	0107.3	026.7	299.9	000.2500	0057.9	043.1	36.2
105.0	004.0000	0107.5	026.7	299.3	000.2500	0057.4	043.0	36.2
106.0	004.0000	0107.5	026.7	298.7	000.2500	0057.4	042.9	36.3
107.0	004.0000	0107.6	026.7	298.1	000.2500	0057.0	042.8	36.3
108.0	004.0000	0107.5	026.7	297.5	000.2500	0056.9	042.7	36.3
109.0	004.0000	0107.5	026.7	296.8	000.2500	0056.9	042.6	36.3
110.0	004.0000	0107.5	026.7	296.2	000.2500	0057.1	042.6	36.3
111.0	004.0000	0107.4	026.7	295.6	000.2500	0057.1	042.6	36.3
112.0	004.0000	0107.4	026.7	295.0	000.2500	0057.4	042.5	36.4
113.0	004.0000	0107.4	026.7	294.3	000.2500	0057.7	042.5	36.4
114.0	004.0000	0107.4	026.7	293.7	000.2500	0057.7	042.5	36.4
115.0	004.0000	0107.4	026.7	293.1	000.2500	0058.0	042.5	36.5
116.0	004.0000	0107.3	026.7	292.4	000.2500	0058.2	042.6	36.5
117.0	004.0000	0107.3	026.7	291.8	000.2500	0058.2	042.6	36.5
118.0	004.0000	0107.2	026.7	291.2	000.2500	0058.4	042.7	36.5
119.0	004.0000	0107.3	026.7	290.6	000.2500	0058.4	042.7	36.5
120.0	004.0000	0107.3	026.7	290.0	000.2500	0058.5	042.8	36.4
121.0	004.0000	0107.2	026.7	289.3	000.2500	0058.5	042.9	36.4
122.0	004.0000	0107.2	026.7	288.7	000.2500	0058.5	043.0	36.4
123.0	004.0000	0107.2	026.7	288.1	000.2500	0058.4	043.1	36.3
124.0	004.0000	0107.1	026.7	287.5	000.2500	0058.4	043.3	36.3
125.0	004.0000	0107.1	026.7	287.0	000.2500	0058.2	043.4	36.2
126.0	004.0000	0107.1	026.7	286.4	000.2500	0058.0	043.6	36.1
127.0	004.0000	0107.1	026.7	285.8	000.2500	0058.0	043.7	36.1
128.0	004.0000	0107.0	026.7	285.2	000.2500	0057.7	043.9	36.0
129.0	004.0000	0106.9	026.7	284.7	000.2500	0057.7	044.1	35.9

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WTMK RADIO STATION
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WANATAH, INDIANA
October 2011

EXHIBIT A8

WQKV - Proposed
Channel = 204A
Max ERP = 0.25 kW
RCAMSL = 289 M
N. Lat = 41 03 14
W. Lng = 86 16 12

WTMK - Proposed
Channel = 203A
Max ERP = 4 kW
RCAMSL = 310.6 M
N. Lat = 41 18 15
W. Lng = 87 01 30

Protected
60 dBu

Interfering
54 dBu

03 second terrain database

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
275.0	000.2500	0059.2	010.1	116.7	004.0000	0107.3	059.7	46.7
276.0	000.2500	0059.4	010.1	116.5	004.0000	0107.3	059.6	46.7
277.0	000.2500	0059.3	010.1	116.4	004.0000	0107.3	059.6	46.7
278.0	000.2500	0059.1	010.1	116.2	004.0000	0107.3	059.5	46.7
279.0	000.2500	0059.0	010.1	116.0	004.0000	0107.3	059.5	46.8
280.0	000.2500	0058.9	010.1	115.9	004.0000	0107.3	059.4	46.8
281.0	000.2500	0058.5	010.1	115.7	004.0000	0107.3	059.4	46.8
282.0	000.2500	0058.1	010.0	115.5	004.0000	0107.3	059.4	46.8
283.0	000.2500	0057.9	010.0	115.4	004.0000	0107.4	059.4	46.8
284.0	000.2500	0057.7	010.0	115.2	004.0000	0107.4	059.3	46.8
285.0	000.2500	0057.7	010.0	115.0	004.0000	0107.4	059.3	46.8
286.0	000.2500	0058.0	010.0	114.9	004.0000	0107.4	059.3	46.8
287.0	000.2500	0058.2	010.0	114.7	004.0000	0107.4	059.2	46.9
288.0	000.2500	0058.4	010.1	114.5	004.0000	0107.4	059.2	46.9
289.0	000.2500	0058.5	010.1	114.4	004.0000	0107.4	059.1	46.9
290.0	000.2500	0058.5	010.1	114.2	004.0000	0107.4	059.1	46.9
291.0	000.2500	0058.4	010.1	114.0	004.0000	0107.4	059.1	46.9
292.0	000.2500	0058.2	010.0	113.9	004.0000	0107.4	059.1	46.9
293.0	000.2500	0058.0	010.0	113.7	004.0000	0107.4	059.1	46.9
294.0	000.2500	0057.7	010.0	113.5	004.0000	0107.4	059.2	46.9
295.0	000.2500	0057.4	010.0	113.3	004.0000	0107.4	059.2	46.9
296.0	000.2500	0057.1	009.9	113.2	004.0000	0107.4	059.2	46.9
297.0	000.2500	0056.9	009.9	113.0	004.0000	0107.4	059.3	46.8
298.0	000.2500	0057.0	009.9	112.8	004.0000	0107.4	059.3	46.8
299.0	000.2500	0057.4	010.0	112.7	004.0000	0107.4	059.2	46.8
300.0	000.2500	0057.9	010.0	112.5	004.0000	0107.4	059.2	46.9
301.0	000.2500	0058.5	010.1	112.3	004.0000	0107.4	059.2	46.9
302.0	000.2500	0059.3	010.1	112.1	004.0000	0107.4	059.2	46.9
303.0	000.2500	0059.4	010.1	112.0	004.0000	0107.4	059.2	46.9
304.0	000.2500	0059.9	010.2	111.8	004.0000	0107.4	059.2	46.9
305.0	000.2500	0060.5	010.2	111.6	004.0000	0107.4	059.2	46.9
306.0	000.2500	0061.5	010.3	111.4	004.0000	0107.4	059.1	46.9
307.0	000.2500	0063.4	010.4	111.2	004.0000	0107.4	059.1	46.9
308.0	000.2500	0064.4	010.5	111.0	004.0000	0107.4	059.0	46.9
309.0	000.2500	0064.0	010.5	110.9	004.0000	0107.4	059.1	46.9
310.0	000.2500	0063.3	010.4	110.7	004.0000	0107.4	059.2	46.9
311.0	000.2500	0062.6	010.4	110.6	004.0000	0107.4	059.3	46.8

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WTMK RADIO STATION
CH 203A - 88.5 MHZ - 4.0 KW DA
WANATAH, INDIANA
October 2011

EXHIBIT A9

Predicted Contour:

N. Lat. = 41 18 15 - Tabulated Protected and Interfering Contour Data
W. Lng. = 87 01 30 - WTMK Radio Station - Wanatah, Indiana

HAAT and Distance to Contour - USGS 03 Second terrain database									
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	40-F1	54-F1	100-F1
000	219.2	91.4	0.9604	-0.18	0.490	17.50	58.09	25.84	1.55
010	219.6	91.0	1.3456	1.29	0.580	19.07	62.30	28.02	1.73
020	214.4	96.2	2.1284	3.28	0.729	21.97	70.02	32.65	2.03
030	214.4	96.2	3.3656	5.27	0.917	24.40	76.96	36.98	2.31
040	213.8	96.8	4.0000	6.02	1.000	25.45	79.77	38.84	2.43
050	212.0	98.6	3.9991	6.02	1.000	25.67	80.09	39.20	2.44
060	210.1	100.5	4.0000	6.02	1.000	25.90	80.43	39.58	2.46
070	208.4	102.2	4.0000	6.02	1.000	26.11	80.74	39.92	2.48
080	206.3	104.3	4.0000	6.02	1.000	26.35	81.10	40.31	2.50
090	205.0	105.6	4.0000	6.02	1.000	26.50	81.32	40.54	2.51
100	203.8	106.8	4.0000	6.02	1.000	26.64	81.52	40.76	2.52
110	203.1	107.5	4.0000	6.02	1.000	26.72	81.64	40.89	2.53
120	203.3	107.3	4.0000	6.02	1.000	26.69	81.60	40.85	2.52
130	203.8	106.8	4.0000	6.02	1.000	26.64	81.53	40.77	2.52
140	204.5	106.1	4.0000	6.02	1.000	26.56	81.40	40.63	2.51
150	204.2	106.4	4.0000	6.02	1.000	26.60	81.46	40.70	2.52
160	204.2	106.4	4.0000	6.02	1.000	26.59	81.45	40.69	2.52
170	203.5	107.1	3.9991	6.02	1.000	26.68	81.58	40.82	2.52
180	203.0	107.6	3.9991	6.02	1.000	26.73	81.65	40.90	2.53
190	202.6	108.0	3.9991	6.02	1.000	26.77	81.72	40.97	2.53
200	202.1	108.5	3.5234	5.47	0.939	26.08	79.86	39.78	2.45
210	201.3	109.3	2.2282	3.48	0.746	23.60	73.13	35.47	2.15
220	200.3	110.3	1.4092	1.49	0.594	21.31	66.74	31.51	1.87
230	199.2	111.4	0.8912	-0.50	0.472	19.13	60.84	28.16	1.60
240	198.1	112.5	0.5636	-2.49	0.375	17.00	55.63	25.26	1.61
250	197.9	112.7	0.3572	-4.47	0.299	14.96	50.57	22.56	1.33
260	199.3	111.3	0.2259	-6.46	0.238	13.23	45.24	19.86	1.05
270	203.9	106.7	0.2304	-6.38	0.240	13.01	44.64	19.49	1.06
280	208.1	102.5	0.2304	-6.38	0.240	12.76	43.84	19.03	1.06
290	210.7	99.9	0.2304	-6.38	0.240	12.61	43.33	18.75	1.06
300	213.4	97.2	0.2304	-6.38	0.240	12.44	42.77	18.44	1.06
310	214.9	95.7	0.2401	-6.20	0.245	12.47	42.88	18.48	1.09
320	216.0	94.6	0.3364	-4.73	0.290	13.46	46.43	20.17	1.29
330	212.7	97.9	0.4624	-3.35	0.340	14.86	50.82	22.34	1.51
340	209.1	101.5	0.5471	-2.62	0.370	15.88	53.42	23.77	1.61
350	216.1	94.5	0.8651	-0.63	0.465	17.33	57.43	25.63	1.51

AMSL= 310.6 M