AMENDMENT TO CORRECT ERP AND DA VALUES
BPFT-20150612ABP
K268CT

MINOR CHANGES IN SITE, ERP AND HAAT

This application corrects the ERP and DA antenna values and requests minor changes to the licensed K268CT facility. The translator will rebroadcast station WHHL(FM) (facility ID #74578) at Hazelwood, MO.

Allocation discussion:

All exhibits were developed utilizing the FCC 30 second terrain database.

Allocation exhibits are provided as follows:

E1	Channel study
E1A	Interference plot to WCIL-FM
E1B	Interference analysis to WXOS
E1C	Aerial view of interference area
E1D	DA pattern
E2	Contours
E3	ASR-NADCON

A channel study is included as E1 demonstrating compliance with 74.1204 with the exception of 2nd adjacent channel facilities WXOS and K270BW analyzed below. A plot of the proposed and existing 60 dBu contours is provided as E2 and E2A (detailed) showing that they overlap and that the proposed 60 dBu is contained within the WWHL 60 dBu.

WXOS analysis :

The proposed channel 268 facility will be located inside the protected contour of second adjacent channel station WXOS on 266C1. Therefore, an interference analysis has been conducted based on the D/U ratio of +40 dB at the proposed site and included as E1B. The WXOS contour at that site is 97.1 dBu and the proposed interference contour of 137.1 dBu (50:10) is 5.3 meters. Clearly, this contour does not reach any populated area (see E1C aerial view).

K270BW analysis:

The proposed K268CT facility is located on the same tower as 2nd adjacent channel facility K270BW. If one assumes 100 meters distance for calculating the K270BW signal it will be 120.9 dBu. The interfering signal at that contour is 160.9 dBu (50:10) or 1 meter. Clearly, this contour will not reach a populated area.

Based on these showings that the interfering contour will not reach a populated area or a major highway, a waiver of Section 74.1204 is requested.

RF Exposure Calculation:

The proposed facility will use a single bay PSI FML-1-DA circularly polarized antenna mounted at 313 meters AGL. The RF contribution of the proposed translator was calculated using the formula included below and a worst case vertical factor of 1.0 to be 0.07 *u*Watts/cm^2 or 0.04% of the maximum permissible 200 *u*Watts/cm^2 exposure for general population/uncontrolled exposure, and less than the 5% requiring consideration.

$$\mathbf{S\ (RF\ in\ } u\mathbf{Watts/cm^2) = \frac{33.4\ (F^2 - Vertical\ Factor)\ X\ (H\ ERP + V\ ERP\ in\ Watts)}{R^2\ (distance\ to\ radiation\ center\ in\ meters - 2\ m)}}$$

E1 CHANNEL STUDY

REFERENCE CH# 268D - 101.5 MHz, Pwr= 0.099 kW DA, HAAT= 295.9 M, COR= 450 M DISPLAY DATES
38 34 28.0 N. Average Protected F(50-50)= 5.62 km DATA 07-09-15
90 19 31.0 W. Standard Directional SEARCH 07-13-15

CH CITY	CALL STATE	TYPE ANT <--	AZI DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
268D Saint Peters	~~K268CT~~ MO	APP DC_ 0.0	0.00 BPFT20150612ABP	38 34 28.0 90 19 31.0	0.250	66.6 450	22.0 Kaspar Broadcasting Co. Of	-84.1*	-77.9*
266C1 East St. Louis	WXOS IL	LIC _CX 211.7 31.7	12.04 BLH20080630ACL	38 28 56.0 90 23 53.0	100.000 300	10.2 466	72.8 St. Louis Fcc License Sub,	-15.9*	-61.4* (1)
268D Saint Peters	~~K268CT~~ MO	LIC DC_ 307.5 127.3	32.50 BLFT20150610AAW	38 45 07.0 90 37 22.0	0.250	51.1 291	15.4 Kaspar Broadcasting Co. Of	-35.7*	-38.5*
270D Bellefontaine	K270BW MO	CP _C_ 0.0 0.0	0.00 BPFT20140414ABB	38 34 28.0 90 19 31.0	0.250	1.1 351	17.9 Educational Media Foundati	-18.6*	-18.6* (2)
270D Bellefontaine	K270BW MO	LIC _C_ 0.0 0.0	0.00 BLFT20130923ADC	38 34 28.0 90 19 31.0	0.250 197	1.1 351	17.9 Educational Media Foundati	-18.6*	-18.6* (2)
268B Carbondale	WCIL-FM IL	LIC NCX 139.0 319.6	127.98 BLH20031010ABX	37 42 04.0 89 22 18.0	28.500 199	131.1 338	64.2 Mrr License Llc	-17.3*	4.2
268C1 Columbia	KPLA MO	LIC NCY 286.8 105.5	175.93 BLH19980306KB	39 00 52.0 92 16 32.0	42.000 324	150.7 561	63.6 Cumulus Licensing Llc	8.1	57.6
269A Elsberry	KXQX MO	LIC NCX 323.9 143.6	72.83 BLH20080318ACV	39 06 09.0 90 49 23.0	3.100 142	46.7 321	30.4 Broadcast Enterprises, Inc	9.3	16.1
269A Greenville	WGEL IL	LIC DCX 73.0 253.6	88.46 BLH20090717ADL	38 48 11.0 89 20 56.0	6.000 90	41.7 238	26.9 Bond Broadcasting Inc.	28.5	34.3
271A Sullivan	KTUI-FM MO	LIC _CX 240.9 60.4	86.11 BLH20080321ABQ	38 11 42.0 91 11 12.0	6.000 84	2.9 339	30.1 Fidelity Broadcasting, Inc	65.6	55.1
271B1 Mount Vernon	WIBV IL	LIC _C_ 100.1 280.9	105.27 BLH20010216AAN	38 24 07.0 89 08 09.0	10.500 155	3.9 310	45.4 Benjamin Stratemeyer	82.6	58.9
270D Potosi	K270CD MO	CP _C_ 208.4 28.1	81.54 BNPFT20131021ACJ	37 55 42.0 90 46 02.0	0.210	1.0 351	11.4 Missouri River Christian B	62.8	68.7

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= West Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
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 restricted contour.

(1) See E1B for disproval of interference.

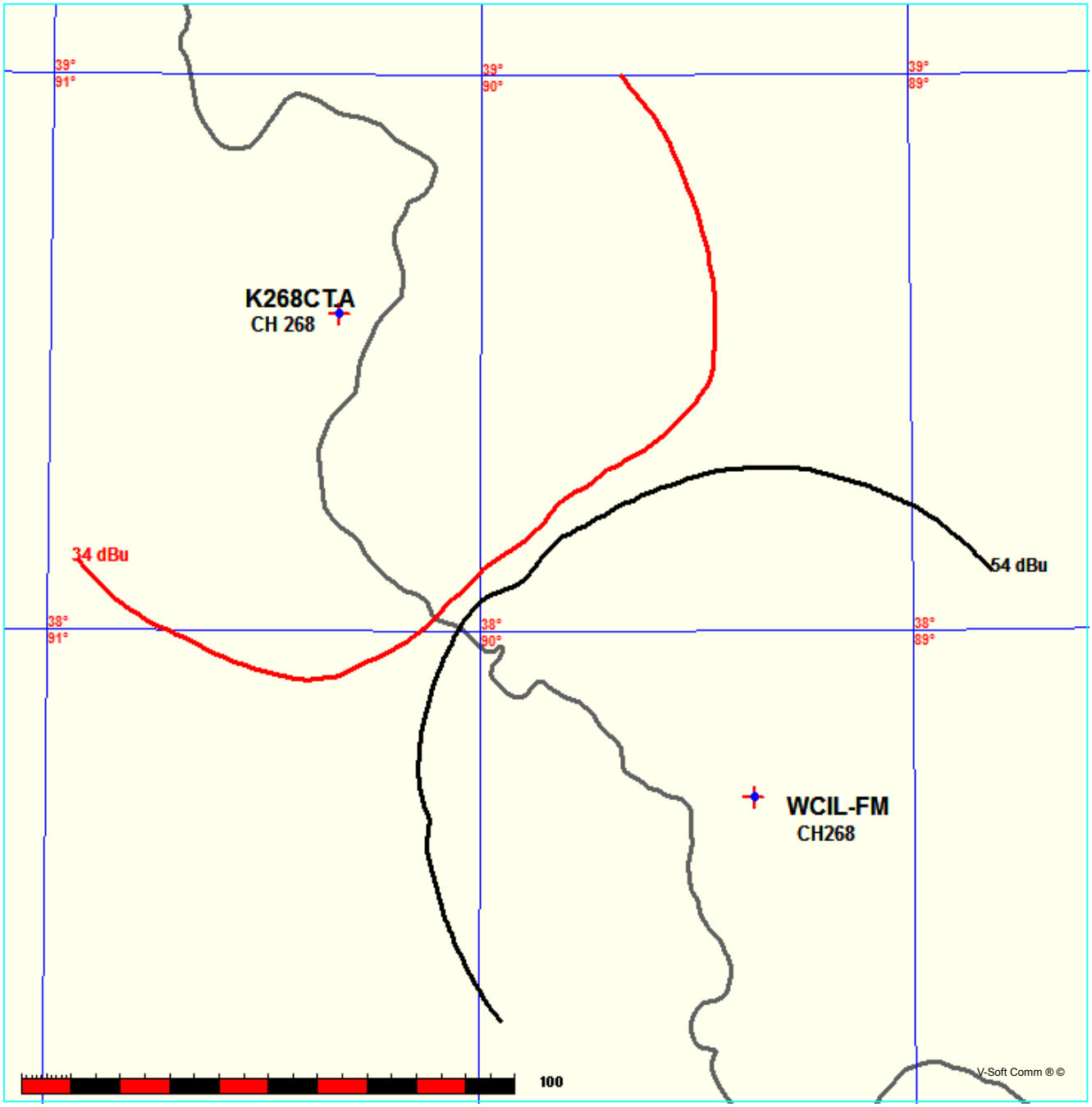
(2) See Technical Report for disproval of interference.

E1A K268CT.APP - WCIL-FM PLOT

FMCommander Single Allocation Study - 07-13-2015 - FCC NGDC 30 Sec
K268CT.A's Overlaps (In= -17.29 km, Out= 4.18 km)

K268CT.A CH 268 D DA
Lat= 38 34 28.0, Lng= 90 19 31.0
0.099 kW 295.9 M HAAT, 450 M COR
Prot.= 60 dBu, Intef.= 34 dBu

WCIL-FM CH 268 B 73.215 N BLH20031010ABX
Lat= 37 42 04.0, Lng= 89 22 18.0
28.5 kW 199 M HAAT, 338 M COR
Prot.= 54 dBu, Intef.= 40 dBu



E1B

K268CT Saint Peters, MO
74.1204(d) Showing
Translator or LPFM Maximum Licensed ERP = 0.099
Translator or LPFM Antenna Height AG = 313 Meters
K268CT Antenna Model = PSI FML-1

Protected Station's Contour = 97.10367 dBu
Translator's or LPFM's full Interference contour 137.10367

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 1.000
Translator/LPFM ERP on the horizon at Review Azimuth = 0.099 kW
Distance between stations = 12.0 km
Protected Station= WXOS, 100 kW, 466 M Meters COR AMSL

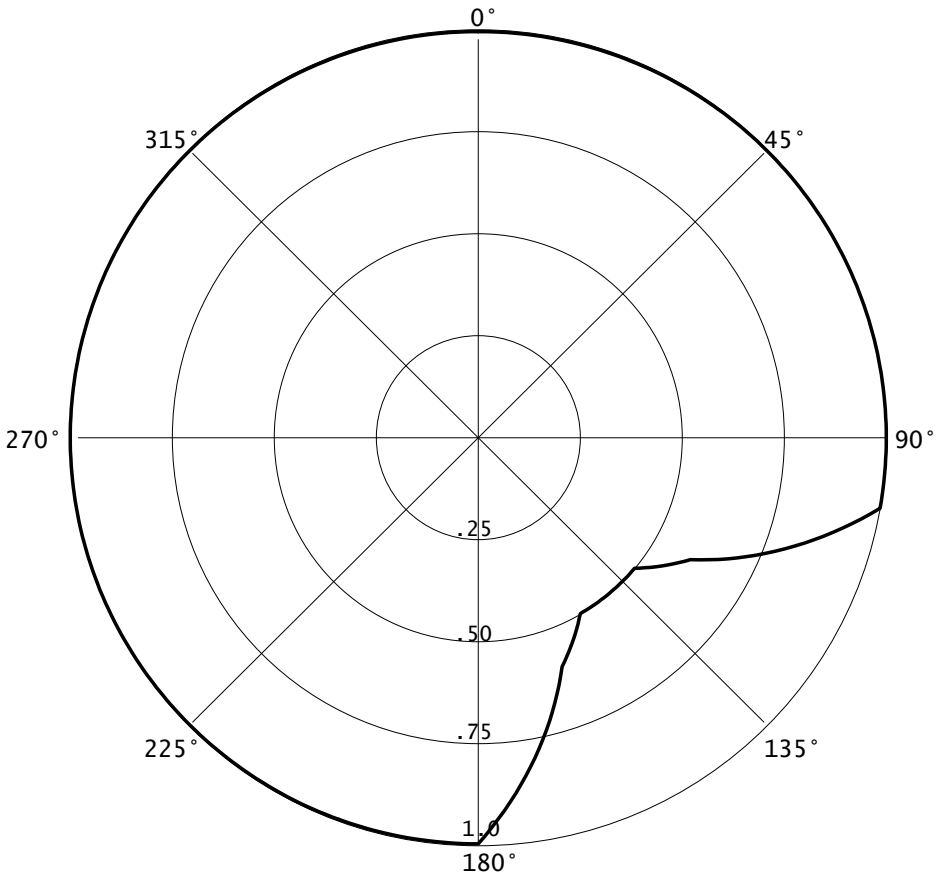
Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)	
00.00	1.0	1.0	0.0990	009.7417	009.7417	313.000	
05.00	0.996	1.0	0.0982	009.7027	009.6658	312.154	
10.00	0.985	1.0	0.0961	009.5956	009.4498	311.334	
15.00	0.966	1.0	0.0924	009.4105	009.0898	310.564	
20.00	0.94	1.0	0.0875	009.1572	008.6049	309.868	
25.00	0.906	1.0	0.0813	008.8260	007.9990	309.270	
30.00	0.866	1.0	0.0742	008.4363	007.3060	308.782	
35.00	0.819	1.0	0.0664	007.9784	006.5356	308.424	
40.00	0.766	1.0	0.0581	007.4621	005.7163	308.203	
45.00	0.707	1.0	0.0495	006.8874	004.8701	308.130	MINIMUM AGL
50.00	0.643	1.0	0.0409	006.2639	004.0264	308.202	
55.00	0.573	1.0	0.0325	005.5820	003.2017	308.428	
60.00	0.5	1.0	0.0248	004.8708	002.4354	308.782	
65.00	0.423	1.0	0.0177	004.1207	001.7415	309.265	
70.00	0.342	1.0	0.0116	003.3317	001.1395	309.869	
75.00	0.259	1.0	0.0066	002.5231	000.6530	310.563	
80.00	0.174	1.0	0.0030	001.6951	000.2943	311.331	
85.00	0.087	1.0	0.0007	000.8475	000.0739	312.156	
90.00	0.001	1.0	0.0000	000.0097	000.0000	312.990	

E1C AERIAL VIEW OF PROPOSED SITE

E1D K268CT.APP DA 07-13-2015 RMS(V)= .939

Azi	Field	dBk	kW
000	1.000	-10.044	0.099
010	1.000	-10.044	0.099
020	1.000	-10.044	0.099
030	1.000	-10.044	0.099
040	1.000	-10.044	0.099
050	1.000	-10.044	0.099
060	1.000	-10.044	0.099
070	1.000	-10.044	0.099
080	1.000	-10.044	0.099
090	1.000	-10.044	0.099
100	1.000	-10.044	0.099
110	0.800	-11.982	0.063
120	0.600	-14.481	0.036
130	0.500	-16.064	0.025
140	0.500	-16.064	0.025
150	0.500	-16.064	0.025
160	0.600	-14.481	0.036
170	0.800	-11.982	0.063
180	1.000	-10.044	0.099
190	1.000	-10.044	0.099
200	1.000	-10.044	0.099
210	1.000	-10.044	0.099
220	1.000	-10.044	0.099
230	1.000	-10.044	0.099
240	1.000	-10.044	0.099
250	1.000	-10.044	0.099
260	1.000	-10.044	0.099
270	1.000	-10.044	0.099
280	1.000	-10.044	0.099
290	1.000	-10.044	0.099
300	1.000	-10.044	0.099
310	1.000	-10.044	0.099
320	1.000	-10.044	0.099
330	1.000	-10.044	0.099
340	1.000	-10.044	0.099
350	1.000	-10.044	0.099

Graph is Relative Field



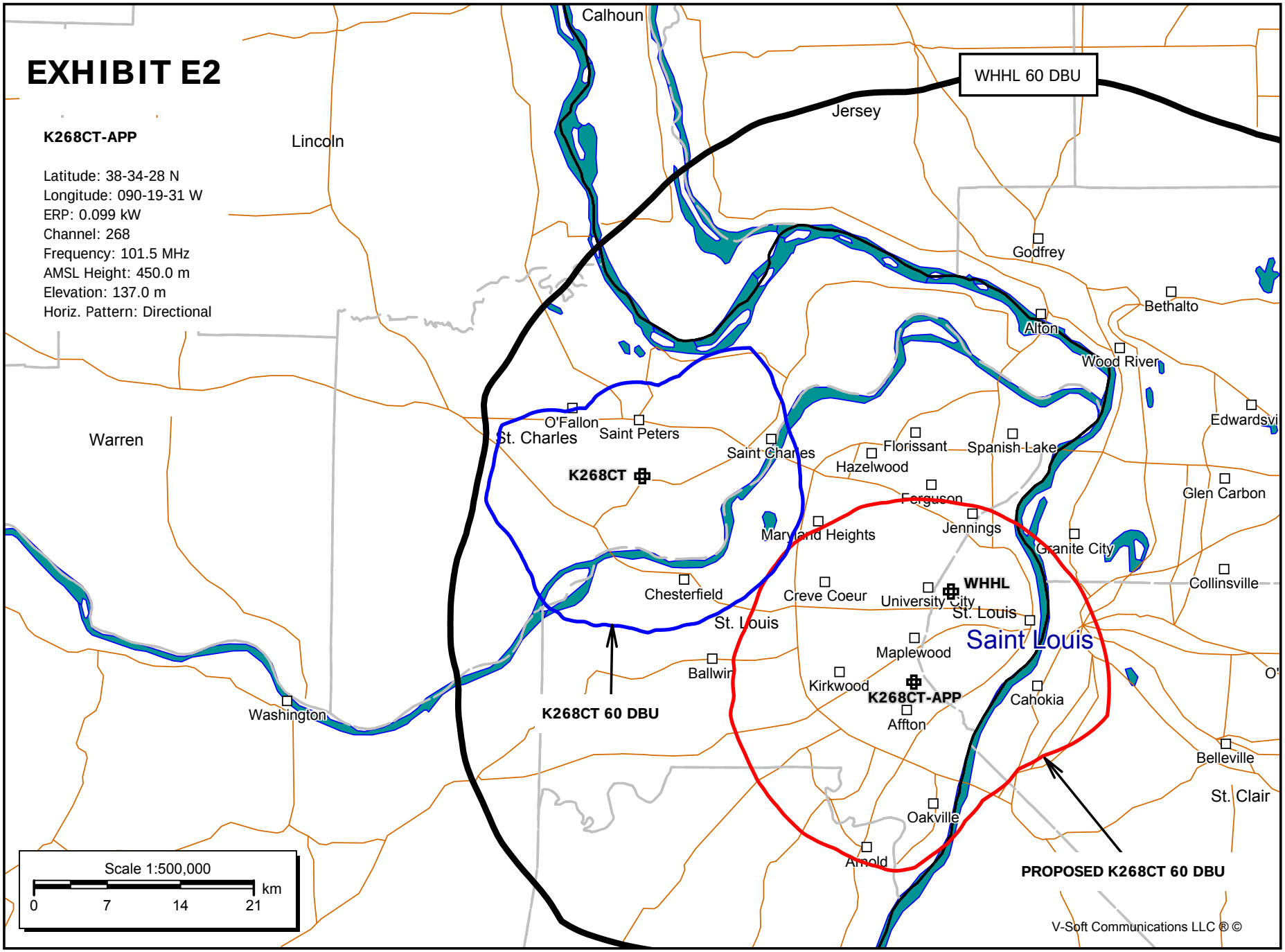


EXHIBIT E2
K268CT-APP
Latitude: 38-34-28 N
Longitude: 090-19-31 W
ERP: 0.099 kW
Channel: 268
Frequency: 101.5 MHz
AMSL Height: 450.0 m
Elevation: 137.0 m
Horiz. Pattern: Directional
WHHL 60 DBU
Calhoun
Jersey
Lincoln
Warren
Godfrey
Bethalto
Alton
Wood River
Edwardsvi
O'Fallon
Saint Peters
St. Charles
Saint Charles
Florissant
Spanish Lake
Hazelwood
K268CT
Ferguson
Glen Carbon
Jennings
Maryland Heights
Granite City
Collinsville
Chesterfield
Creve Coeur
WHHL
University City
St. Louis
St. Louis
Saint Louis
Maplewood
Ballwin
Kirkwood
K268CT-APP
Cahokia
Affton
Washington
K268CT 60 DBU
Belleville
St. Clair
Oakville
Arnold
PROPOSED K268CT 60 DBU
Scale 1:500,000
km
0
7
14
21
V-Soft Communications LLC ® ©

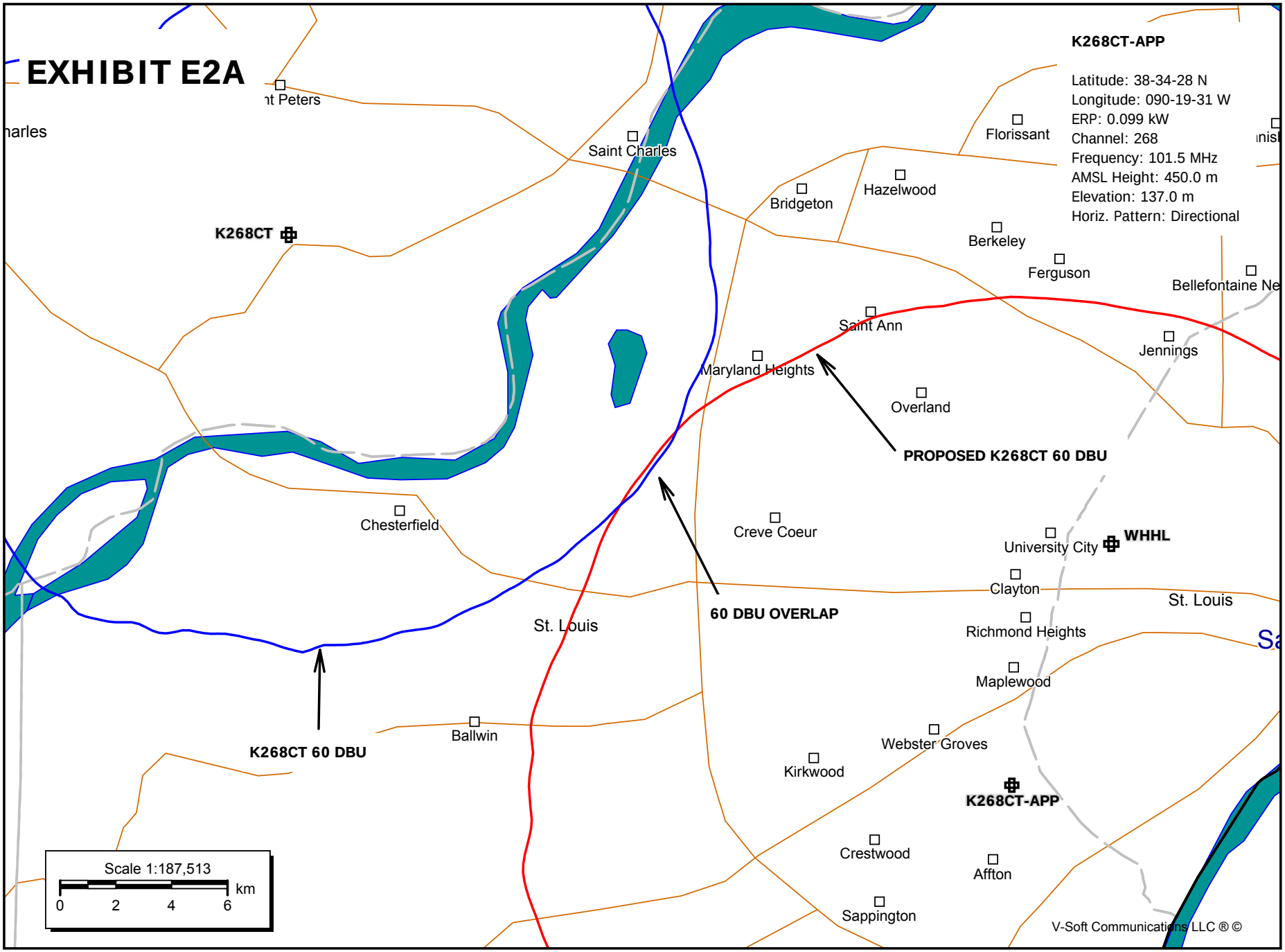


EXHIBIT E2A
K268CT-APP
Latitude: 38-34-28 N
Longitude: 090-19-31 W
ERP: 0.099 kW
Channel: 268
Frequency: 101.5 MHz
AMSL Height: 450.0 m
Elevation: 137.0 m
Horiz. Pattern: Directional
K268CT
PROPOSED K268CT 60 DBU
60 DBU OVERLAP
K268CT 60 DBU
WHHL
K268CT-APP
Saint Charles
Florissant
Bridgeton
Hazelwood
Berkeley
Ferguson
Bellefontaine Ne
Saint Ann
Jennings
Maryland Heights
Overland
Chesterfield
Creve Coeur
University City
Clayton
St. Louis
Richmond Heights
Maplewood
Ballwin
Webster Groves
Kirkwood
Crestwood
Affton
Sappington
Scale 1:187,513
km
0 2 4 6
V-Soft Communications LLC ® ©

Registration 1020785

E3

Map Registration

Registration Detail

Reg Number	1020785	Status	Constructed
File Number	A0855574	Constructed	05/01/1986
EMI	No	Dismantled	
NEPA	No		

Antenna Structure

Structure Type GTOWER - Guyed Structure Used for Communication Purposes

Location (in NAD83 Coordinates)

Lat/Long	38-34-27.9 N 090-19-31.9 W	Address	7555 Mackenzie Road (ST. Louis MO 4 #305889)
City, State	SAINT LOUIS , MO		
Zip	63123	County	ST. LOUIS
Center of AM Array		Position of Tower in Array	

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
137.2	339.9
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
477.1	339.9

Painting and Lighting Specifications

FAA Chapters 3, 4, 5, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K

FAA Notification

FAA Study	2013-ACE-830-OE	FAA Issue Date	08/01/2013

Owner & Contact Information

FRN	0014350276	Owner Entity Type	Limited Liability Company

Owner

SpectraSite Communications, LLC. through American Towers, LLC.
Attention To: Regulatory Compliance FAA FCC
10 Presidential Way
Woburn , MA 01801

P: (678)265-6770
F:
E: faa-fcc@americantower.com

Contact

Attention To: FAA FCC
10 Presidential Way
Woburn , MA 01801

P: (678)265-6770
F:
E: faa-fcc@americantower.com

Last Action Status

Status	Constructed	Received	08/15/2013
Purpose	Notification	Entered	08/15/2013
Mode	Interactive		

Related Applications

08/15/2013	A0855574	- Notification (NT)
08/15/2013	A0855573	- Modification (MD)
01/16/2013	A0820151	- Change Owner (OC)

Output from NADCON for station K268CT

North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

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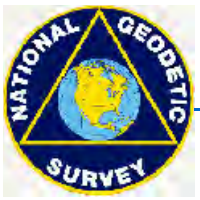
Transformation #: 1 Region: Conus

	Latitude	Longitude	
NAD 27 datum values:	38 34 27.71089	90 19 31.48304	
NAD 83 datum values:	38 34 27.90000	90 19 31.90000	
NAD 27 - NAD 83 shift values:	-0.18911	-0.41696	(secs.)
	-5.831	-10.093	(meters)

Magnitude of total shift: 11.657(meters)



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