

Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Lincoln, NE

Channel Study

REFERENCE		CH# 220D - 91.9 MHz, Pwr= 0.099 kW, HAAT= 54.7 M, COR= 430 M								DISPLAY DATES	
40 48 42.0 N.		Average Protected F(50-50)= 5.6 km								DATA	05-17-17
96 42 10.0 W.		Omni-directional								SEARCH	05-17-17
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)
220D Lincoln	K220GT!	CP	C NE	143.3 323.3	0.03 BPFT20151120AUW	40 48 41.0 96 42 09.0	0.099	26.0 430	7.8 Educational Media Foundati	-31.7	-26.8
220D Lincoln	K220GT!	LIC	DCN NE	139.6 319.6	14.72 BLFT19981211TD	40 42 39.0 96 35 22.0	0.099 134	35.6 531	10.6 Educational Media Foundati	-26.5	-14.4
220A Crete	KDNE	LIC	CN NE	224.7 44.6	29.80 BLED19930914KF	40 37 16.0 96 57 04.0	0.200 20	22.4 446	6.7 Doane College Board Of Tru	0.5	0.1
222C0 Omaha	KEZO-FM	LIC	C NE	45.7 226.1	78.81 BMLH20080129ABE	41 18 16.0 96 01 41.0	100.000 361	11.0 702	76.8 Scripps Broadcasting Holdi	58.3	1.3
220C1 Aurora	KJGS	CP	ZCX NE	280.3 99.5	106.58 BPED20130401ACU	40 58 34.0 97 56 56.0	100.000 50	92.8 589	25.5 Radio 74 Internationale	6.2	55.8
218C1 Omaha	KIOS-FM	LIC	CN NE	48.1 228.6	79.66 BLED19890508KA	41 17 15.0 95 59 37.0	55.000 169	6.4 503	55.1 Douglas County School Dist	63.8	23.9
220L1 Omaha	KPDI-LP	CP		54.9 235.4	77.44 BMPL20170306AAM	41 12 33.0 95 56 47.0	0.034 51			52.3	42.6
219A Shubert	KSSH	LIC	CX NE	128.8 309.4	102.23 BLED20120921AEG	40 13 56.0 95 45 55.0	3.100 104	37.3 418	24.6 My Bridge Radio	59.1	69.4

Terrain database is NGDC 30 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= West Zone, Co to 3rd
adjacent.

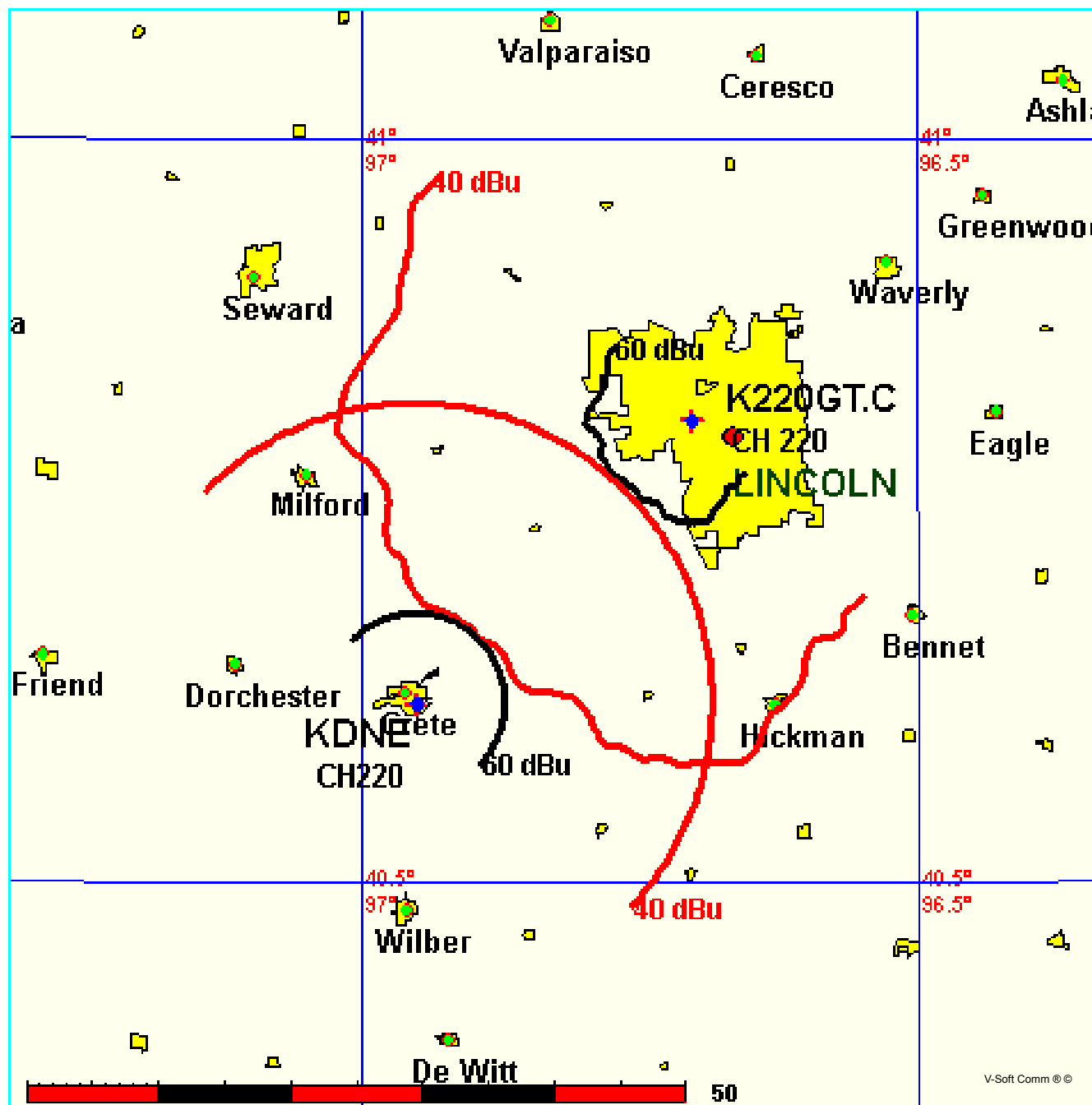
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)

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FMCommander Single Allocation Study - 05-17-2017 - NGDC 30 SEC
K220GT.C's Overlaps (In= 0.54 km, Out= 0.14 km)

K220GT.C CH 220 D
Lat= 40 48 42.0, Lng= 96 42 10.0
0.099 kW 54.7 m HAAT, 430 m COR
Prot.= 60 dBu, Intef.= 40 dBu

KDNE CH 220 A BLED19930914KF
Lat= 40 37 16.0, Lng= 96 57 04.0
0.2 kW 20 m HAAT, 446 m COR
Prot.= 60 dBu, Intef.= 40 dBu



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K220GT.P vs. KDNE

05-26-2017 Terrain Data: NGDC 30 SEC FMOver Analysis

KDNE BLED19930914KF

K220GT. P

Channel = 220A
Max ERP = 0.2 kW
RCAMSL = 446 m
N. Lat. 40 37 16.0
W. Lng. 96 57 04.0
Protected
60 dBu

Channel = 220D
Max ERP = 0.099 kW
RCAMSL = 429.99 m
N. Lat. 40 48 42.0
W. Lng. 96 42 10.0
Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
345.0	000.2000	0015.5	006.7	237.1	000.0990	0051.6	027.1	38.35	
346.0	000.2000	0013.2	006.7	237.0	000.0990	0051.6	026.9	38.42	
347.0	000.2000	0010.8	006.7	236.9	000.0990	0051.6	026.8	38.49	
348.0	000.2000	0008.7	006.7	236.8	000.0990	0051.6	026.7	38.56	
349.0	000.2000	0007.0	006.7	236.7	000.0990	0051.5	026.6	38.63	
350.0	000.2000	0005.2	006.7	236.6	000.0990	0051.5	026.5	38.70	
351.0	000.2000	0003.2	006.7	236.5	000.0990	0051.5	026.4	38.76	
352.0	000.2000	0001.3	006.7	236.4	000.0990	0051.4	026.3	38.82	
353.0	000.2000	0000.0	006.7	236.3	000.0990	0051.4	026.2	38.89	
354.0	000.2000	-0000.5	006.7	236.2	000.0990	0051.3	026.1	38.95	
355.0	000.2000	-0000.6	006.7	236.1	000.0990	0051.3	026.0	39.01	
356.0	000.2000	-0001.8	006.7	236.0	000.0990	0051.2	025.9	39.06	
357.0	000.2000	-0002.5	006.7	235.8	000.0990	0051.1	025.8	39.12	
358.0	000.2000	-0002.1	006.7	235.7	000.0990	0051.0	025.7	39.17	
359.0	000.2000	-0000.1	006.7	235.5	000.0990	0050.9	025.6	39.22	
000.0	000.2000	0001.9	006.7	235.4	000.0990	0050.8	025.5	39.26	
001.0	000.2000	0002.9	006.7	235.2	000.0990	0050.7	025.4	39.31	
002.0	000.2000	0003.3	006.7	235.1	000.0990	0050.5	025.3	39.35	
003.0	000.2000	0003.9	006.7	234.9	000.0990	0050.4	025.2	39.38	
004.0	000.2000	0005.0	006.7	234.7	000.0990	0050.2	025.1	39.42	
005.0	000.2000	0006.0	006.7	234.6	000.0990	0050.0	025.0	39.45	
006.0	000.2000	0007.2	006.7	234.4	000.0990	0049.8	024.9	39.47	
007.0	000.2000	0007.8	006.7	234.2	000.0990	0049.6	024.8	39.50	
008.0	000.2000	0008.4	006.7	234.0	000.0990	0049.4	024.8	39.52	
009.0	000.2000	0009.1	006.7	233.8	000.0990	0049.2	024.7	39.54	
010.0	000.2000	0010.5	006.7	233.6	000.0990	0049.0	024.6	39.55	
011.0	000.2000	0012.4	006.7	233.4	000.0990	0048.7	024.5	39.57	
012.0	000.2000	0014.7	006.7	233.2	000.0990	0048.5	024.4	39.58	
013.0	000.2000	0016.7	006.7	233.0	000.0990	0048.3	024.4	39.60	
014.0	000.2000	0017.9	006.7	232.8	000.0990	0048.1	024.3	39.61	
015.0	000.2000	0018.1	006.7	232.6	000.0990	0047.9	024.2	39.62	
016.0	000.2000	0018.2	006.7	232.4	000.0990	0047.7	024.1	39.63	
017.0	000.2000	0018.8	006.7	232.1	000.0990	0047.5	024.1	39.64	
018.0	000.2000	0019.9	006.7	231.9	000.0990	0047.3	024.0	39.65	
019.0	000.2000	0021.2	006.7	231.7	000.0990	0047.1	023.9	39.66	
020.0	000.2000	0022.1	006.7	231.4	000.0990	0046.9	023.9	39.68	
021.0	000.2000	0022.4	006.7	231.2	000.0990	0046.7	023.8	39.69	
022.0	000.2000	0022.2	006.7	231.0	000.0990	0046.6	023.8	39.70	
023.0	000.2000	0022.1	006.7	230.7	000.0990	0046.4	023.7	39.71	
024.0	000.2000	0021.9	006.7	230.5	000.0990	0046.3	023.6	39.73	
025.0	000.2000	0021.7	006.7	230.2	000.0990	0046.2	023.6	39.74	
026.0	000.2000	0021.7	006.7	229.9	000.0990	0046.1	023.5	39.75	
027.0	000.2000	0022.1	006.7	229.7	000.0990	0045.9	023.5	39.76	

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028.0	000.2000	0022.6	006.7	229.4	000.0990	0045.8	023.5	39.76
029.0	000.2000	0023.2	006.7	229.1	000.0990	0045.7	023.4	39.77
030.0	000.2000	0024.3	006.7	228.9	000.0990	0045.5	023.4	39.77
031.0	000.2000	0025.7	006.7	228.6	000.0990	0045.4	023.3	39.77
032.0	000.2000	0026.7	006.7	228.3	000.0990	0045.3	023.3	39.78
033.0	000.2000	0027.4	006.7	228.0	000.0990	0045.2	023.3	39.77
034.0	000.2000	0028.0	006.7	227.8	000.0990	0045.0	023.2	39.77
035.0	000.2000	0028.6	006.7	227.5	000.0990	0044.9	023.2	39.77
036.0	000.2000	0029.1	006.7	227.2	000.0990	0044.8	023.2	39.77
037.0	000.2000	0029.4	006.7	226.9	000.0990	0044.8	023.2	39.77
038.0	000.2000	0029.7	006.7	226.6	000.0990	0044.7	023.1	39.78
039.0	000.2000	0029.7	006.7	226.3	000.0990	0044.8	023.1	39.79
040.0	000.2000	0029.5	006.7	226.1	000.0990	0044.8	023.1	39.81
041.0	000.2000	0028.7	006.7	225.8	000.0990	0044.9	023.1	39.83
042.0	000.2000	0027.2	006.7	225.5	000.0990	0044.9	023.1	39.86
043.0	000.2000	0025.7	006.7	225.2	000.0990	0045.0	023.1	39.88
044.0	000.2000	0024.5	006.7	224.9	000.0990	0045.1	023.1	39.89
045.0	000.2000	0023.3	006.7	224.6	000.0990	0045.1	023.1	39.90
046.0	000.2000	0022.1	006.7	224.3	000.0990	0045.1	023.1	39.90
047.0	000.2000	0020.8	006.7	224.0	000.0990	0045.1	023.1	39.89
048.0	000.2000	0019.5	006.7	223.7	000.0990	0045.0	023.1	39.87
049.0	000.2000	0018.2	006.7	223.4	000.0990	0044.9	023.1	39.84
050.0	000.2000	0016.8	006.7	223.2	000.0990	0044.7	023.1	39.79
051.0	000.2000	0015.5	006.7	222.9	000.0990	0044.6	023.1	39.75
052.0	000.2000	0014.5	006.7	222.6	000.0990	0044.4	023.2	39.70
053.0	000.2000	0014.1	006.7	222.3	000.0990	0044.2	023.2	39.65
054.0	000.2000	0013.9	006.7	222.0	000.0990	0044.0	023.2	39.60
055.0	000.2000	0013.7	006.7	221.7	000.0990	0043.9	023.2	39.55
056.0	000.2000	0013.7	006.7	221.5	000.0990	0043.8	023.3	39.51
057.0	000.2000	0013.6	006.7	221.2	000.0990	0043.7	023.3	39.47
058.0	000.2000	0013.1	006.7	220.9	000.0990	0043.7	023.3	39.44
059.0	000.2000	0012.2	006.7	220.6	000.0990	0043.7	023.4	39.41
060.0	000.2000	0011.3	006.7	220.4	000.0990	0043.7	023.4	39.39
061.0	000.2000	0010.5	006.7	220.1	000.0990	0043.8	023.4	39.37
062.0	000.2000	0009.9	006.7	219.8	000.0990	0043.8	023.5	39.35
063.0	000.2000	0009.4	006.7	219.6	000.0990	0043.9	023.5	39.33
064.0	000.2000	0008.8	006.7	219.3	000.0990	0044.0	023.6	39.32
065.0	000.2000	0008.5	006.7	219.0	000.0990	0044.1	023.6	39.30
066.0	000.2000	0008.6	006.7	218.8	000.0990	0044.3	023.7	39.29
067.0	000.2000	0009.0	006.7	218.5	000.0990	0044.4	023.7	39.28
068.0	000.2000	0009.4	006.7	218.3	000.0990	0044.5	023.8	39.27
069.0	000.2000	0009.8	006.7	218.0	000.0990	0044.7	023.8	39.26
070.0	000.2000	0010.5	006.7	217.8	000.0990	0044.8	023.9	39.24
071.0	000.2000	0011.6	006.7	217.6	000.0990	0045.0	024.0	39.23
072.0	000.2000	0013.1	006.7	217.3	000.0990	0045.2	024.0	39.22
073.0	000.2000	0014.6	006.7	217.1	000.0990	0045.4	024.1	39.21
074.0	000.2000	0016.0	006.7	216.9	000.0990	0045.6	024.2	39.20
075.0	000.2000	0017.2	006.7	216.7	000.0990	0045.8	024.2	39.19
076.0	000.2000	0018.3	006.7	216.5	000.0990	0046.0	024.3	39.18
077.0	000.2000	0019.1	006.7	216.2	000.0990	0046.2	024.4	39.16
078.0	000.2000	0019.6	006.7	216.0	000.0990	0046.4	024.5	39.15
079.0	000.2000	0019.4	006.7	215.8	000.0990	0046.6	024.5	39.13
080.0	000.2000	0019.1	006.7	215.6	000.0990	0046.8	024.6	39.11
081.0	000.2000	0019.1	006.7	215.5	000.0990	0046.9	024.7	39.08
082.0	000.2000	0020.0	006.7	215.3	000.0990	0047.1	024.8	39.05
083.0	000.2000	0021.2	006.7	215.1	000.0990	0047.3	024.9	39.03
084.0	000.2000	0022.1	006.7	214.9	000.0990	0047.4	025.0	38.99
085.0	000.2000	0022.4	006.7	214.7	000.0990	0047.6	025.1	38.96
086.0	000.2000	0022.6	006.7	214.6	000.0990	0047.7	025.1	38.92
087.0	000.2000	0022.6	006.7	214.4	000.0990	0047.8	025.2	38.87
088.0	000.2000	0022.6	006.7	214.2	000.0990	0047.9	025.3	38.83
089.0	000.2000	0022.4	006.7	214.1	000.0990	0048.0	025.4	38.78
090.0	000.2000	0021.9	006.7	213.9	000.0990	0048.1	025.5	38.73

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Lincoln, NE

091.0	000.2000	0021.5	006.7	213.8	000.0990	0048.1	025.6	38.67
092.0	000.2000	0021.0	006.7	213.7	000.0990	0048.2	025.7	38.61
093.0	000.2000	0021.7	006.7	213.5	000.0990	0048.2	025.8	38.55
094.0	000.2000	0022.9	006.7	213.4	000.0990	0048.3	025.9	38.49
095.0	000.2000	0024.3	006.7	213.3	000.0990	0048.3	026.0	38.43
096.0	000.2000	0025.3	006.7	213.2	000.0990	0048.3	026.1	38.36
097.0	000.2000	0025.5	006.7	213.0	000.0990	0048.3	026.2	38.30
098.0	000.2000	0025.8	006.7	212.9	000.0990	0048.3	026.3	38.23
099.0	000.2000	0026.2	006.7	212.8	000.0990	0048.3	026.4	38.16
100.0	000.2000	0026.8	006.7	212.7	000.0990	0048.4	026.6	38.09
101.0	000.2000	0027.3	006.7	212.6	000.0990	0048.4	026.7	38.02
102.0	000.2000	0027.6	006.7	212.5	000.0990	0048.4	026.8	37.95
103.0	000.2000	0028.2	006.7	212.5	000.0990	0048.4	026.9	37.88
104.0	000.2000	0028.6	006.7	212.4	000.0990	0048.4	027.0	37.81
