

Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 18

Horace, ND

Channel Study

REFERENCE		CH# 208A - 89.5 MHz, Pwr= 3 kW, HAAT= 45.7 M, COR= 322 M							DISPLAY DATES		
46 49 18.0 N.		Average Protected F(50-50)= 16.3 km							DATA 01-03-23		
96 50 30.0 W.		Omni-directional							SEARCH 01-03-23		
CH	CALL	TYPE	ANT	AZI.	DIST	LAT.	Pwr (kW)	INT (km)	PRO (km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG.	HAAT (M)	COR (M)	LICENSEE	(Overlap in km)	
208C3	KFAA!	LIC	CN	319.4	7.86	46 52 30.90	7.300		---	Reference---	
Horace			ND	139.3	BLED20170502AAU	96 54 32.30	28	298	Educational Media Foundati		
206C1	KNNZ	LIC	DVN	115.6	46.23	46 38 27.90	100.000	4.8	44.4	25.5	0.2
Hawley			MN	296.0	BLED20130521AFM	96 17 48.20	81	444	Pioneer Public Broadcastin		
209A	KCMF	LIC	CN	134.0	80.05	46 19 11.90	2.700	25.5	17.3	38.4	38.8
Fergus Falls			MN	314.5	BLED20030610ACR	96 05 33.20	66	439	Minnesota Public Radio		
210C1	KKWE	LIC	DCN	84.6	101.08	46 53 57.90	60.000	5.5	48.9	79.5	50.5
White Earth			MN	265.6	BLED20110805ABJ	95 31 15.10	97	563	White Earth Land Recovery		
207C1	KOPJ	LIC	CN	99.4	170.23	46 33 07.90	100.000	89.1	59.4	65.1	87.0
Sebeka			MN	281.0	BLED20051005AAI	94 39 04.00	143	560	We Have This Hope Christia		
207C2	KUND-FM	LIC	CN	350.4	154.87	48 11 39.70	50.000	67.6	42.8	70.6	87.4
Grand Forks			ND	170.1	BLED20060830AAO	97 11 29.70	89	336	Prairie Public Broadcastin		

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 2, Co to 3rd adjacent.											
Call signs with exclamation marks 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)											
« = Station meets FCC minimum distance spacing for its class.											
Reference station has protected zone issue: Canada											

Note: In order to more accurately analyze the facility contemplated herein, the USGS 03 second terrain database has been used for all calculations, instead of the standard 30 second database.

Exhibit 18-A

FMCommander Single Allocation Study - 01-04-2023 - USGS 03 SEC
KFAA.P's Overlaps (In= 25.46 km, Out= 0.22 km)

KFAA.P CH 208 A

Lat= 46 49 18.00, Lng= 96 50 30.00

3.0 kW 45.7 m HAAT, 322 m COR

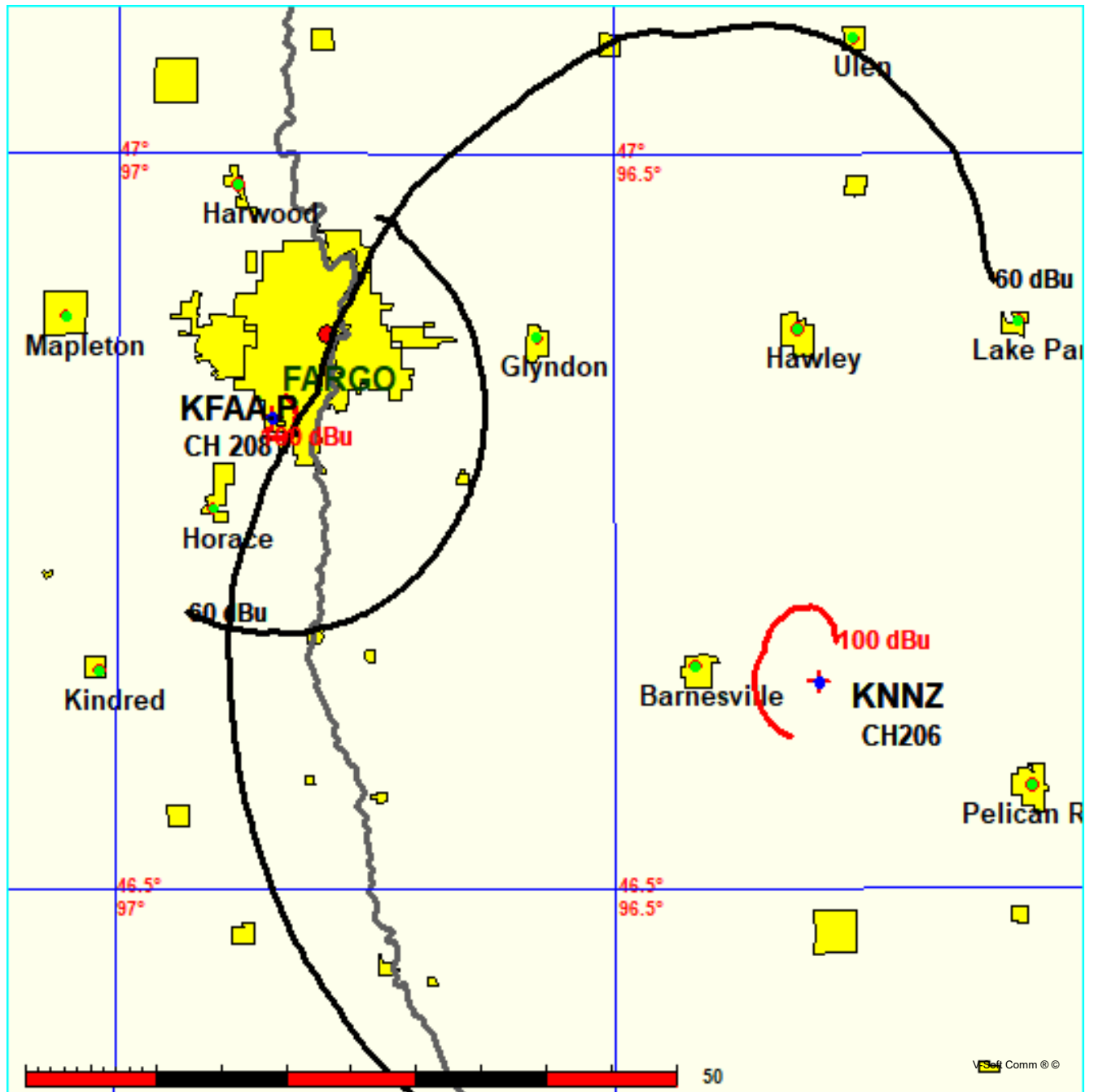
Prot.= 60 dBu, Intef.= 100 dBu

KNNZ CH 206 C1 DA BLED20130521AFM

Lat= 46 38 27.90, Lng= 96 17 48.20

100.0 kW 81.2 m HAAT, 443.7 m COR

Prot.= 60 dBu, Intef.= 100 dBu



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Exhibit 18-A

Horace, ND

KFAA.P vs. KNNZ

01-04-2023 Terrain Data: USGS 03 SEC FMOver Analysis

KNNZ BLED20130521AFM

KFAA.P

Channel = 206C1
Max ERP = 100 kW
RCAMSL = 443.7 m
N. Lat. 46 38 27.90
W. Lng. 96 17 48.20
Protected
60 dBu

Channel = 208A
Max ERP = 3 kW
RCAMSL = 322 m
N. Lat. 46 49 18.00
W. Lng. 96 50 30.00
Interfering
100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
285.0	030.0304	0130.2	044.9	192.2	003.0000	0045.8	008.8	70.81	
286.0	030.0304	0129.7	044.8	191.4	003.0000	0045.7	008.0	72.26	
287.0	030.0304	0129.5	044.8	190.7	003.0000	0045.7	007.3	73.93	
288.0	030.0304	0129.4	044.8	189.8	003.0000	0045.7	006.5	75.88	
289.0	030.0304	0129.2	044.8	188.4	003.0000	0045.7	005.7	78.16	
290.0	030.0304	0129.0	044.8	186.5	003.0000	0045.7	005.0	80.71	
291.0	030.0304	0128.5	044.7	183.0	003.0000	0045.8	004.2	83.46	
292.0	030.0304	0127.6	044.6	177.3	003.0000	0045.8	003.5	86.56	
293.0	030.0304	0127.0	044.5	169.3	003.0000	0046.0	002.9	90.13	
294.0	030.0304	0126.7	044.4	157.6	003.0000	0046.2	002.3	94.39	
295.0	030.0304	0126.5	044.4	139.8	003.0000	0045.4	001.9	97.86	
296.0	030.0304	0126.3	044.4	115.6	003.0000	0044.2	001.7	98.93	
297.0	030.0304	0126.0	044.3	092.2	003.0000	0044.2	002.0	97.09	
298.0	030.0304	0125.6	044.3	075.9	003.0000	0044.7	002.4	93.19	
299.0	030.0304	0125.0	044.2	066.1	003.0000	0045.8	003.1	89.08	
300.0	030.0304	0124.3	044.1	060.1	003.0000	0046.1	003.7	85.61	
301.0	031.6069	0123.4	044.4	051.3	003.0000	0046.3	004.3	83.22	
302.0	033.2237	0122.3	044.7	045.1	003.0000	0046.2	005.0	80.77	
303.0	034.8808	0121.0	044.9	041.0	003.0000	0047.1	005.7	78.52	
304.0	036.5783	0119.2	045.1	038.5	003.0000	0047.1	006.5	76.23	
305.0	038.3161	0117.9	045.3	036.4	003.0000	0047.1	007.2	74.26	