

Kanza Society, Inc.
340 Application for Modification of Construction Permit
KCSE-FM, BMPED-20101012AFD
Lamar, CO
February 2, 2010

EXHIBIT 18: Contour Overlap and Spacing Requirements

Documentation for Form 340, Section VII, Items 15a and 15b

An FM interference study using Dataworld's FM Study program and based on the HAAT of eight standard radials shows no prohibited interference to or from the Proposed station to existing co-, 1st-, 2nd- and 3rd adjacent channel stations and authorizations. Nor does it show any prohibited interference to stations 53 or 54 channels removed. Wide margins of separation exist for all stations studied. Details of the study are provided below.

BIAfn/Dataworld FM Channel Study

Safety Zone: 30.0 km (18.6 mi)
Safety dB: 3.0
Channel(s): 214 A
Coordinates: N 38° 02' 10.0" W 102° 35' 58.0"
Effective radiated power: 0.25 kW
Antenna 113 m (370.6 ft) above average terrain
FM Translators excluded
Database: FCC 2/1/2011 12:00:00 AM

Call City of License	Auth	Licensee name St	FCC File Number	Chan Freq	HAAT(m) HAMS(m)	ERP (kW)	Latitude Longitude	Br-to -from	Dist (km)	Req (km)
NEW DES MOINES	APP	SIERRA GRANDE BROADCASTING NM	BPRM-20011009AEH	6 II 82			N 36° 45' 48.0" W 103° 52' 12.0"	218.8 38.0	180.6 69.94	110.6 CLEAR
Assumed ERP: 100 kW; HAAT: 300 m										
Proposed Channel 214 A 71.75 dBuV/m F(50,10) Interfering contour = 7.1 km					NEW Channel 6 2 47 dBuV/m F(50,50) Service contour = 103.6 km					
KJLI LA JUNTA	CP	GREAT PLAINS CHRISTIAN RADIO, IN CO	BNPED-20071018AHX	*211 C2 90.1	104.0 1390.0	25 H 25 V	N 37° 58' 43.0" W 103° 34' 48.0"	266.0 85.4	86.35 45.53	40.82 CLEAR
Proposed Channel 214 A 100 dBuV/m F(50,10) Interfering contour = 1.1 km					KJLI Channel 211 C2 60 dBuV/m F(50,50) Service contour = 39.7 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					KJLI Channel 211 C2 100 dBuV/m F(50,10) Interfering contour = 4.2 km					
NEW WRAY	CP	THE PRAISE NETWORK, INC. CO	BNPED-20071018ATE	*212 A 90.3	77.0 1211.0		N 40° 03' 13.0" W 102° 13' 32.0"	8.1 188.3	226.3 211.4	14.90 CLEAR
Proposed Channel 214 A 100 dBuV/m F(50,10) Interfering contour = 1.1 km					NEW Channel 212 A 60 dBuV/m F(50,50) Service contour = 12.9 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					NEW Channel 212 A 100 dBuV/m F(50,10) Interfering contour = 1.2 km					
NEW HOOKER	CP	KANZA SOCIETY, INC. OK	BNPED-20071018BDF	*213 C2 90.5	123.0 1010.0	30 H 30 V	N 36° 45' 52.2" W 101° 12' 32.2"	138.6 319.4	187.3 106.9	80.35 CLEAR
Proposed Channel 214 A 54 dBuV/m F(50,10) Interfering contour = 20.6 km					NEW Channel 213 C2 60 dBuV/m F(50,50) Service contour = 43.9 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					NEW Channel 213 C2 54 dBuV/m F(50,10) Interfering contour = 66.7 km					
KCSE LAMAR	CP	KANZA SOCIETY, INC. CO	BMPED-20101012AFD	*214 C3 90.7	100.0 1246.0	12 H 12 V	N 38° 02' 10.0" W 102° 35' 58.0"	0.0 0.0	0.000 -112	112.0 SHORT
Proposed Channel 214 A 40 dBuV/m F(50,10) Interfering contour = 46.6 km					KCSE Channel 214 C3 60 dBuV/m F(50,50) Service contour = 33.3 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					KCSE Channel 214 C3 40 dBuV/m F(50,10) Interfering contour = 98.3 km					
Current CP										

Call City of License	Auth	Licensee name St	FCC File Number	Chan Freq	HAAT(m) HAMS L(m)	ERP (kW)	Latitude Longitude	Br-to -from	Dist (km)	Req (km)
KJHL BOISE CITY	LIC	GREAT PLAINS CHRISTIAN RADIO, IN OK	BLED-20081231AAX	*215 C3 90.9	107.0 1368.0	10 H 10 V	N 36° 44' 05.0" W 102° 29' 53.0"	176.4 356.5	144.7 80.19	64.52 CLEAR
Proposed Channel 214 A 54 dBuV/m F(50,10) Interfering contour = 20.6 km					KJHL Channel 215 C3 60 dBuV/m F(50,50) Service contour = 32.9 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					KJHL Channel 215 C3 54 dBuV/m F(50,10) Interfering contour = 50.8 km					
KANZ GARDEN CITY	LIC	KANZA SOCIETY, INC. KS	BLED-20070529ACD	*216 C1 91.1	292.2 1178.0	100 H 100 V	N 37° 46' 43.0" W 100° 53' 43.4"	100.3 281.4	152.6 79.70	72.86 CLEAR
Proposed Channel 214 A 100 dBuV/m F(50,10) Interfering contour = 1.1 km					KANZ Channel 216 C1 60 dBuV/m F(50,50) Service contour = 71.8 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					KANZ Channel 216 C1 100 dBuV/m F(50,10) Interfering contour = 10.0 km					
KZNZ ELKHART	CP	KANZA SOCIETY, INC. KS	BNPED-20071018BDC	*217 A 91.3	81.0 1170.0	0.13 H 0.13 V	N 37° 00' 01.2" W 101° 54' 29.7"	151.9 332.3	130.2 115.7	14.48 CLEAR
Proposed Channel 214 A 100 dBuV/m F(50,10) Interfering contour = 1.1 km					KZNZ Channel 217 A 60 dBuV/m F(50,50) Service contour = 9.9 km					
Proposed Channel 214 A 60 dBuV/m F(50,50) Service contour = 13.7 km					KZNZ Channel 217 A 100 dBuV/m F(50,10) Interfering contour = 0.8 km					
KOCK WALSENBURG	LIC	EDWARD MAGNUS CO	BLH-20090105AGJ	267 C1 101.3	305.0 2095.0	95.5 H 95.5 V	N 37° 47' 20.0" W 104° 29' 12.0"	261.2 80.0	168.2 146.2	22.00 CLEAR
Required separation derived from section 73.207 of FCC rules					KOCK Channel 267 C1 91 dBuV/m F(50,50) Service contour = 16.9 km					
Proposed Channel 214 A 91 dBuV/m F(50,10) Interfering contour = 2.2 km										
KSMM-FM LIBERAL	LIC	ROCKING M RADIO, INC. KS	BLH-19821213AK	268 C1 101.5	165.0 1002.0	100 H 100 V	N 37° 03' 20.0" W 100° 48' 40.0"	124.1 305.2	191.9 169.9	22.00 CLEAR
Required separation derived from section 73.207 of FCC rules					KSMM-FM Channel 268 C1 91 dBuV/m F(50,50) Service contour = 12.5 km					
Proposed Channel 214 A 91 dBuV/m F(50,10) Interfering contour = 2.2 km										
>> End of channel 214 A study <<										