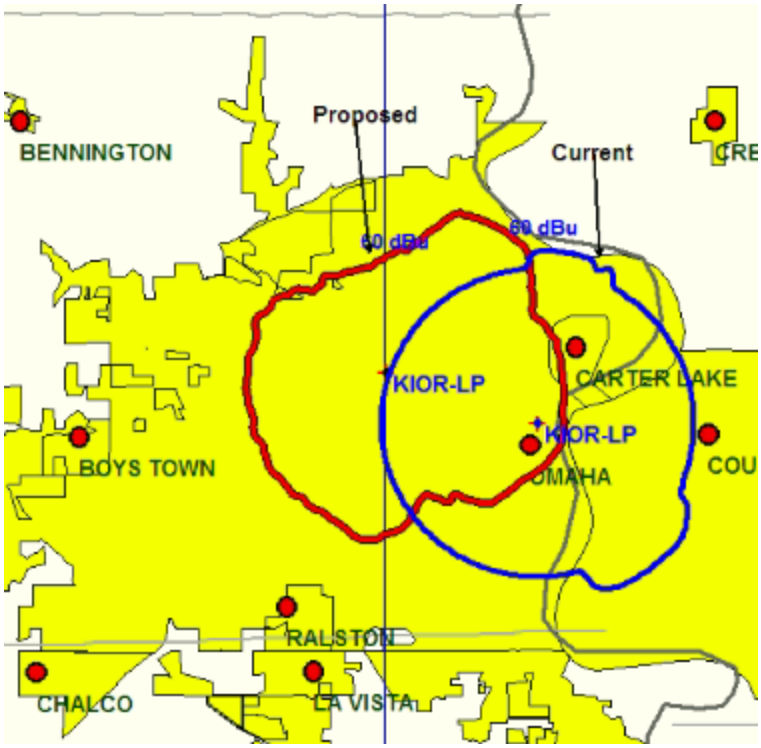
INDEPENDENT OMAHA RADIO PROJECT, INC.
KIOR-LP OMAHA, NE
Facility ID: 196774

MINOR CHANGE

Channel	220 (channel change -- see below)
New Location:	41 16 57.4 N, 95 59 57.8 W -- NAD 83
Antenna AGL	10 m
Antenna Ground	384 m
Antenna COR	394 m
HAAT	61.4 m
Power	23 w



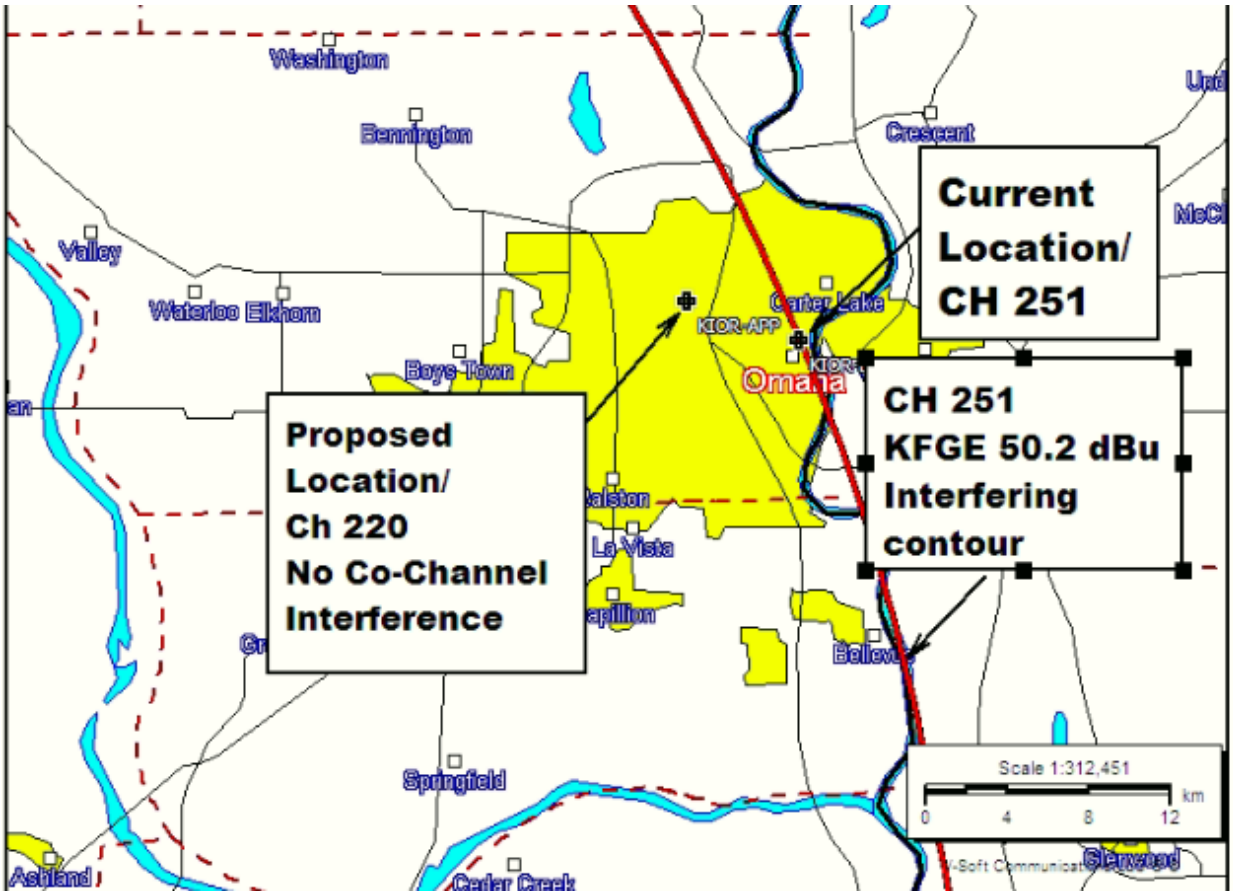
Proposed 60 dBu F(50,50) with
minor change move demonstrated

REQUEST FOR REPLACEMENT CHANNEL

§73.870(a)(1) permits LPFM channel change "upon a technical showing of reduced interference, to any frequency".

Figure below shows on the current channel, CH 251, a co-channel imparts a 50.2 dBu of (FCC) interference at the current broadcast location. One the proposed channel, CH 220, there is no station imparting any interference within the vicinity.

Thus, there is reduced income interference on the proposed channel 91.9 FM, warranting a channel change per §73.870(a)(1).



SPACING

Independent Omaha Radio Project

REFERENCE — DISPLAY DATES
41 16 57.40 N. — CLASS = L1 — DATA 09-10-21
95 59 57.80 W. — Current Spacings to 2nd Adj. — SEARCH 09-25-21

Channel 220 - 91.9 MHz

Call		Channel	Location		Azi	Dist	FCC	Margin
*KEZO-FM	LIC	222C0	Omaha	NE	315.1	3.42	83.5	-80.1
*KIOS-FM	LIC	218C1	Omaha	NE	40.4	0.70	72.5	-71.8
KDNE	LIC	220A	Crete	NE	227.7	108.62	66.5	42.1
K220GT	LIC	220D	Lincoln	NE	228.6	78.88	31.5	47.4
K06QG-D	LI	06 --	Sioux City	IA	352.8	146.15	89.0	57.2

All separation margins include rounding
* See Second Adj Waiver Request

TOWAIR

DETERMINATION Results	
Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.	
Your Specifications	
NAD83 Coordinates	
Latitude	41-16-57.4 north
Longitude	095-59-57.8 west
Measurements (Meters)	
Overall Structure Height (AGL)	10
Support Structure Height (AGL)	0
Site Elevation (AMSL)	384
Structure Type	
MTOWER - Monopole	

SECOND ADJACENT WAIVER REQUEST

License respectfully requests a "second adjacent channel waiver" with regards to Section 47 C.F.R. Section 73.807 of the FCC rules based upon the "Living Way" precedence (Living Way Ministries, Inc., Memorandum Opinion and Order, 17 FCC Red

17054, 17056, ¶ 5 (2002), recon. denied 23 FCC Red 15070 (2008)). This will be accomplished by using Free Space methodology of calculation.

Using U/D methodology, at the proposed KIOR-LP transmitter location KIOS-FM has a signal strength of 127.3 dBu and KEZO-FM has a signal strength of 114.8 dBu. Interference will occur when the signal strength of the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 154.8 dBu contour. 23 watts ERP is selected for broadcast power for 61.4 m HAAT.

The distance to this contour, using free space method:
$D = (7.01*P^{1/2})/E$, where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

P = 23 w, E = 154.8 dBu D = 0.6 meters

The sphere of 0.6 meters around the antenna is completely above ground.

Due to zero population within this radiation radius, this meets the "Living Way" Criteria to qualify for a Waiver of 47 C.F.R. Section 73.807.

Thus, the applicant requests a second adjacent waiver based upon evidence no interference is proposed.