

# INTERFERENCE ANALYSIS FOR PROPOSED K18KK-D COLUMBIA, MO (CHANNEL 18)

tvstudy v2.2.4 (Z2Qqz3)  
Database: localhost, Study: k18kk\_pl, Model: Longley-Rice

Study build station data: LMS TV 2017-11-22 (93)

Proposal: K18KK\_P1 D18 LD APP COLUMBIA, MO  
File number: k18kk\_pl  
Facility ID: 187925  
Station data: User record  
Record ID: 1902  
Country: U.S.

Build options:  
Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KMIZ	D17	DT	LIC	COLUMBIA, MO	BLCDT20110722ADS	0.0 km
No	KSNF	D17	DT	CP	JOPLIN, MO	BLANK0000027633	257.6
No	KSNF	D17	DT	APP	JOPLIN, MO	BLANK0000034752	257.6
No	K17FU-D	D17	LD	LIC	MARSHFIELD, MO	BLDTL20091102ACM	165.9
No	KUMO-LD	D17	LD	CP	ST LOUIS, MO	BDISDTL20110825AAL	194.9
No	KETC	D17	DT	CP	ST. LOUIS, MO	BLANK0000025353	190.2
No	KFSM-TV	D18	DT	LIC	FORT SMITH, AR	BLCDT20060530AIM	356.5
No	KVTJ-DT	D18	DT	CP	JONESBORO, AR	BLANK0000028469	395.8
No	KTNW-LD	D18	LD	LIC	LITTLE ROCK, AR	BLDTL20070521AAM	418.2
No	K18GU-D	D18	LD	LIC	OTTUMWA, IA	BLDTT20091229AES	243.6
No	WBXC-CD	D18	DC	APP	CHAMPAIGN/URBANA, IL	BLANK0000034661	398.9
Yes	WSEC	D18	DT	CP	JACKSONVILLE, IL	BLANK0000026289	235.0
Yes	WSEC	D18	DT	APP	JACKSONVILLE, IL	BLANK0000034851	235.0
No	W27DF-D	N18-	TX	LIC	QUINCY, IL	BLTTL20011120AAN	169.9
No	WAWV-TV	D18	DT	CP	TERRE HAUTE, IN	BLANK0000028343	449.1
No	KDKZ-LD	D18	LD	LIC	FARMINGTON, MO	BLANK0000029554	205.1
Yes	KCPT	D18	DT	LIC	KANSAS CITY, MO	BLEDT20090821AAU	169.9
No	KYTV	D19	DT	CP	SPRINGFIELD, MO	BLANK0000033931	181.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D18  
Mask: Full Service  
Latitude: 38 46 29.00 N (NAD83)  
Longitude: 92 33 23.00 W  
Height AMSL: 554.0 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: Omnidirectional  
Elev Pattn: Generic  
Elec Tilt: 0.50

49.1 dBu contour:	Azimuth	ERP	HAAT	Distance
	0.0 deg	15.0 kW	333.6 m	59.5 km
	45.0	15.0	337.7	59.7
	90.0	15.0	337.4	59.7
	135.0	15.0	360.7	60.9
	180.0	15.0	329.5	59.3
	225.0	15.0	323.9	59.0
	270.0	15.0	301.3	57.8
	315.0	15.0	318.7	58.7

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m Computed HAAT: 330 m

Distance to Canadian border: 873.6 km

Distance to Mexican border: 1287.6 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 297.3 degrees Distance: 554.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 281.8 degrees Distance: 1096.6 km

No land mobile station failures found

Proposal is not within the Offshore Radio Service protected area

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Study cell size: 1.00 km  
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

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Interference to BLANK0000026289 CP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WSEC	D18	DT	CP	JACKSONVILLE, IL	BLANK0000026289			
Undesireds:	K18KK_P1	D18	LD	APP	COLUMBIA, MO	k18kk_p1	235.0 km		
	KETC	D17	DT	CP	ST. LOUIS, MO	BLANK0000025353	128.2		
	WBXC-CD	D18	DC	APP	CHAMPAIGN/URBANA, IL	BLANK0000034661	163.9		
	WMEU-CD	D18	DC	APP	CHICAGO, IL	BLANK0000034599	324.3		
	WAWV-TV	D18	DT	CP	TERRE HAUTE, IN	BLANK0000028343	231.4		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
19638.7		523,718		19552.2		522,722	19515.4 520,066 19500.5 520,044 0.08 0.00		
Undesired				Total IX	Unique IX, before	Unique IX, after			
K18KK_P1 D18 LD APP				24.9	277	14.9	22		
KETC D17 DT CP				20.9	2,571	16.0	2,316		
WBXC-CD D18 DC APP				7.0	0	2.0	0		
WAWV-TV D18 DT CP				12.9	340	8.9	85		

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Interference to BLANK0000034851 APP scenario 24

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WSEC	D18	DT	APP	JACKSONVILLE, IL	BLANK0000034851			
Undesireds:	K18KK_P1	D18	LD	APP	COLUMBIA, MO	k18kk_p1	235.0 km		
	KETC	D17	DT	BL	ST. LOUIS, MO	DTVBL62182	128.2		
	WBXC-CD	D18	DC	CP	CHAMPAIGN/URBANA, IL	BLANK0000025142	163.9		
	WMEU-CD	D18	DC	APP	CHICAGO, IL	BLANK0000034599	324.3		
	WAWV-TV	D18	DT	BL	TERRE HAUTE, IN	DTVBL65247	231.4		
	WKYI-CD	D18	DC	APP	LOUISVILLE, KY	BLANK0000034220	388.5		
	KCPT	D18	DT	LIC	KANSAS CITY, MO	BLEDT20090821AAU	385.5		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
29657.9		1,027,172		29510.7		1,021,519	29139.0 958,917 29116.1 958,673 0.08 0.03		
Undesired				Total IX	Unique IX, before	Unique IX, after			
K18KK_P1 D18 LD APP				43.8	307	22.9	244		
KETC D17 DT BL				180.7	59,002	150.8	52,180		
WAWV-TV D18 DT BL				204.0	10,377	179.1	3,549		
KCPT D18 DT LIC				10.0	32	5.0	3		

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Interference to BLEDT20090821AAU LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	KCPT	D18	DT	LIC	KANSAS CITY, MO	BLEDT20090821AAU			
Undesireds:	K18KK_P1	D18	LD	APP	COLUMBIA, MO	k18kk_p1	169.9 km		
	KFSM-TV	D18	DT	LIC	FORT SMITH, AR	BLCDT20060530AIM	362.7		
	WSEC	D18	DT	CP	JACKSONVILLE, IL	BLANK0000026289	385.5		
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX		
35353.6		2,503,198		34884.1		2,500,946	34842.8 2,500,772 33813.4 2,491,634 2.95 0.37		
Undesired				Total IX	Unique IX, before	Unique IX, after			
K18KK_P1 D18 LD APP				1040.5	9,159	1029.4	9,138		
KFSM-TV D18 DT LIC				41.3	174	30.2	153		

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