

INTERFERENCE ANALYSIS FOR PROPOSED K46FM-D, BAYFIELD, CO, CHANNEL 21

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: K46FM21-430WBB-F, Model: Longley-Rice

Study build station data: LMS TV 2018-04-17

Proposal: K46FM-D D21 LD APP BAYFIELD, CO
File number: K46FM21-430WBB-F
Facility ID: 52631
Station data: User record
Record ID: 2815
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K19CM-D	N19z	TX	LIC	FARMINGTON, NM	BLTT20060511ABS	87.4 km
Yes	KRMU	D20	DT	LIC	DURANGO, CO	BLEDT20041012AIM	37.7
No	KJCT-LP	D20	LD	LIC	GRAND JUNCTION, CO	BLDTL20150129AAO	217.8
No	K20JW-D	D20	LD	CP	JACKS CABIN, CO	BPDTT20150123AAB	180.0
No	K20JW-D	D20	LD	LIC	JACKS CABIN, CO	BLDTT20091125AFK	180.0
No	K21HF-D	D21	LD	LIC	ASPEN, CO	BLDTT20121119AHA	233.9
Yes	K21LC-D	D21	LD	LIC	CORTEZ, CO	BLDTT20140102ATL	60.3
No	KDEO-LD	D21	LD	APP	DENVER, CO	BLANK0000049532	344.3
No	K21GT-D	D21	LD	CP	DOVE CREEK, ETC, CO	BPDTT20130318AFP	184.8
No	K21GT-D	D21	LD	LIC	DOVE CREEK, ETC, CO	BLDTT20120615ABE	141.1
No	KFCT	D21	DT	LIC	FORT COLLINS, CO	BLCDT20070920ACM	448.2
No	K21JK-D	D21	LD	LIC	MONTROSE, CO	BLDTL20081107AEK	140.4
No	K21EF-D	D21	LD	LIC	PITKIN, CO	BLDTT20101129AMG	179.0
No	KGHB-CD	D21z	DC	CP	PUEBLO, ETC., CO	BLANK0000034455	288.9
No	KYNM-CD	D21	DC	LIC	ALBUQUERQUE, NM	BLANK0000001606	237.8
Yes	K46KV-D	D21	LD	APP	FARMINGTON, NM	BLANK0000052018	84.9
No	K21IM-D	D21	LD	LIC	FORT SUMNER, NM	BLDTT20090303AAY	412.3
No	K21FD-D	D21	LD	LIC	TAOS, ETC., NM	BLDTT20091113ABQ	193.7
No	K34GN-D	D21	LD	APP	BICKNELL & TEASDALE, UT	BLANK0000052685	374.3
No	K21KC-D	D21	LD	LIC	BLUFF, ETC, UT	BLDTT20140520AIH	183.3
No	K21JY-D	D21	LD	LIC	BOULDER, UT	BLDTT20100806AAB	355.6
No	K21HZ-D	D21	LD	LIC	EMERY, UT	BLDTT20080125ABR	377.9
No	K21IQ-D	D21	LD	LIC	ESCALANTE, UT	BLDTT20110425ACL	368.5
No	K21JV-D	D21	LD	LIC	GREEN RIVER, UT	BLDTT20100107ABN	308.8
No	K21IF-D	D21	LD	LIC	HANKSVILLE, UT	BLDTT20091104AAD	311.8
No	K21IW-D	D21	LD	LIC	MEXICAN HAT, UT	BLDTT20091222AMC	210.4
No	K21IX-D	D21	LD	LIC	MONTEZUMA CRK/ANETH, UT	BLDTT20091222AMD	159.9
No	K21IU-D	D21	LD	LIC	NAVAJO MTN.SCH.,ETC., UT	BLDTT20091222AMA	291.4
No	K21IV-D	D21	LD	LIC	OLJETO, UT	BLDTT20091222AMB	252.6
No	K22CU-D	D22	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ACH	61.9
No	K22JM-D	D22	LD	LIC	GUNNISON, CO	BLDTL20121119AOW	157.8
No	KLUZ-TV	D22	DT	LIC	ALBUQUERQUE, NM	BLCDT20090618ACG	208.4
No	K22LF-D	D22	LD	CP	AZTEC, NM	BDCCDTT20120521ACI	54.7
No	K22GE	N22-	TX	LIC	DULCE, NM	BLTT20020326ABE	50.8
No	K22GE	D22	LD	CP	DULCE, NM	BDFCDTT20090824ADF	50.8
No	K28ER	N28+	TX	LIC	DULCE & LUMBERTON, NM	BLTT19970421JC	50.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21

Mask: Stringent
Latitude: 37 11 3.40 N (NAD83)
Longitude: 107 29 8.70 W
Height AMSL: 2711.0 m
HAAT: 0.0 m
Peak ERP: 0.430 kW
Antenna: SCA-4DR-8S (ID 20753) 265.0 deg
Elev Pattn: Generic

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	335.9 m	8.0 km
45.0	0.000	280.5	7.5
90.0	0.005	514.2	20.0
135.0	0.000	534.5	7.3
180.0	0.004	478.1	18.1
225.0	0.199	671.5	43.5
270.0	0.421	624.2	47.4
315.0	0.121	533.9	38.1

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Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 497 m

Distance to Canadian border: 1313.3 km

Distance to Mexican border: 600.3 km

Conditions at FCC monitoring station: Douglas AZ
Bearing: 198.1 degrees Distance: 662.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 30.0 degrees Distance: 379.3 km

No land mobile station failures found

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%

----- Interference to BLEDT20041012AIM LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KRMU	D20	DT	LIC	DURANGO, CO	BLEDT20041012AIM	
Undesireds:	K46FM-D	D21	LD	APP	BAYFIELD, CO	K46FM21-430WBB-F	37.7 km
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	7965.0	85,822	6288.1	66,043	6288.1 66,043	6206.1 65,890	1.30 0.23
Undesired				Total IX	Unique IX, before	Unique IX, after	
K46FM-D D21 LD APP		82.0		153		82.0 153	

----- Interference to BLDTT20140102ATL LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K21LC-D	D21	LD	LIC	CORTEZ, CO	BLDTT20140102ATL	
Undesireds:	K46FM-D	D21	LD	APP	BAYFIELD, CO	K46FM21-430WBB-F	60.3 km
	K21GT-D	D21	LD	CP	DOVE CREEK, ETC, CO	BPDTT20130318AFP	124.9
	K46KV-D	D21	LD	APP	FARMINGTON, NM	BLANK0000052018	73.1
	K22CU-D	D22	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ACH	2.0
	K22GE	N22-	TX	LIC	DULCE, NM	BLTT20020326ABE	110.8
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	1461.2	17,612	1315.6	17,240	705.8 1,892	674.9 1,892	4.38 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
K46FM-D D21 LD APP		51.8		0		30.9 0	
K21GT-D D21 LD CP		49.8		49	2.0 0	2.0 0	
K46KV-D D21 LD APP		34.1		0	29.0 0	12.0 0	
K22CU-D D22 LD LIC		577.8		15,348	529.0 15,299	525.0 15,299	

----- Interference to BLDTT20140102ATL LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	K21LC-D	D21	LD	LIC	CORTEZ, CO	BLDTT20140102ATL	
Undesireds:	K46FM-D	D21	LD	APP	BAYFIELD, CO	K46FM21-430WBB-F	60.3 km
	K21GT-D	D21	LD	LIC	DOVE CREEK, ETC, CO	BLDTT20120615ABE	82.3
	K46KV-D	D21	LD	APP	FARMINGTON, NM	BLANK0000052018	73.1
	K22CU-D	D22	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ACH	2.0
	K22GE	N22-	TX	LIC	DULCE, NM	BLTT20020326ABE	110.8
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	1461.2	17,612	1315.6	17,240	700.9 1,892	674.9 1,892	3.70 0.00
Undesired				Total IX	Unique IX, before	Unique IX, after	
K46FM-D D21 LD APP		51.8		0		25.9 0	
K21GT-D D21 LD LIC		9.0		0	7.0 0	2.0 0	
K46KV-D D21 LD APP		34.1		0	30.0 0	13.1 0	
K22CU-D D22 LD LIC		577.8		15,348	571.8 15,348	569.8 15,348	

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Interference to BLANK0000052018 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K46KV-D	D21	LD	APP	FARMINGTON, NM	BLANK0000052018	
Undesireds:	K46FM-D	D21	LD	APP	BAYFIELD, CO	K46FM21-430WBB-F	84.9 km
	K21LC-D	D21	LD	LIC	CORTEZ, CO	BLDTT20140102ATL	73.1
	K21GT-D	D21	LD	CP	DOVE CREEK, ETC, CO	BPDTT20130318AFP	163.8
	K22GE	N22-	TX	LIC	DULCE, NM	BLTT20020326ABE	115.7
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
324.7 58,313		309.7 57,503		308.7 57,482		299.6 57,473	2.92 0.02
Undesired				Total IX	Unique IX, before	Unique IX, after	
K46FM-D	D21	LD	APP	10.0 30		9.0 9	
K21LC-D	D21	LD	LIC	1.0 21	1.0 21	0.0 0	

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K46FM-D	D21	LD	APP	BAYFIELD, CO	K46FM21-430WBB-F	
Undesireds:	KRMU	D20	DT	LIC	DURANGO, CO	BLEDT20041012AIM	37.7 km
	K21GT-D	D21	LD	CP	DOVE CREEK, ETC, CO	BPDTT20130318AFP	184.8
	K46KV-D	D21	LD	APP	FARMINGTON, NM	BLANK0000052018	84.9
	K22LF-D	D22	LD	CP	AZTEC, NM	BDCCDTT20120521ACI	54.7
	K22GE	N22-	TX	LIC	DULCE, NM	BLTT20020326ABE	50.8
Service area		Terrain-limited		IX-free		Percent IX	
2486.5 46,438		2226.9 36,541		2208.9 36,082		0.81 1.26	
Undesired				Total IX	Unique IX	Prcnt Unique IX	
KRMU	D20	DT	LIC	5.0 458	5.0 458	0.22 1.25	
K46KV-D	D21	LD	APP	13.0 1	12.0 1	0.54 0.00	
K22LF-D	D22	LD	CP	1.0 0	0.0 0	0.00 0.00	
