

RF HAZARD STATEMENT

TELEVISION TRANSLATOR STATION K41FM
DEMING, NEW MEXICO
CHANNEL 32 0.16 KW 1720 M AMSL

With respect to the potential for human exposure to radio frequency (RF) energy, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF energy at ground level in excess of FCC standards.* Power density calculations were conducted at 2-m above ground† based on the following conservative assumptions, with the following results:

Call Sign	Channel	Average ERP (kW)	Distance (m)	Relative Field Factor‡	FCC Limit§ (mW/cm ²)	Percentage of Limit
K41FM	32	0.16	13	0.5	0.387	2.9%

As indicated above, the exposure to RF energy at 2-m above ground level will not exceed 2.9% of the FCC limit for general population / uncontrolled exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF energy and it is categorically excluded from environmental processing.

The licensee, in coordination with the other users of the transmission facility, shall reduce power or cease operation as necessary to protect persons having access to the tower or antenna from RF energy in excess of the FCC guidelines.

* See Section 1.1310 of the FCC Rules and Regulations.

† The radiation center height above ground is 13 m.

‡ This is a conservative estimate of the downward relative field at steep elevation angles.

§ for general population/uncontrolled environments

TECHNICAL SUMMARY

TELEVISION TRANSLATOR STATION K41FM
DEMING, NEW MEXICO
CHANNEL 32 0.16 KW 1720 M AMSL

1. The instant application is a Special Displacement Window^{*} application for K41FM, currently licensed on channel 41 at Deming, New Mexico (FCC File No. BLTT-20030113ABZ).
2. K41FM is eligible to file in the Special Displacement Window according to the following:
 - a. It has been licensed and operating since prior to April 13, 2017;[†] and,
 - b. It is licensed on a channel that has been repurposed for use by 600 MHz Band wireless services (channels 38-51).
3. An interference analysis for the proposed K41FM facility on Channel 32 was conducted using the FCC's *TVStudy* software. The results of this analysis are attached as an exhibit. The proposed facility meets the FCC's interference protection requirements with respect to all protected facilities based on the current and post-transition allocation environments.

^{*} See FCC *Public Notice* dated February 9, 2018 entitled "Incentive Auction Task Force and Media Bureau Announce Post-Incentive Auction Special Displacement Window April 10, 2018 through May 15, 2018 and Make Location and Channel Data Available" (DA 18-124, MB Docket No. 16-306, GN Docket No. 12-268).

[†] See *Media Bureau Announces Date by Which LPTV and TV Translator Stations Must Be "Operating" In Order to Participate In Post-Incentive Auction Special Displacement Window, Public Notice*, 31 FCC Rcd 5383 (MB 2016).

INTERFERENCE ANALYSIS FOR PROPOSED K41FM, DEMING, NM, CHANNEL 32

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: K41FM32-160WBB, Model: Longley-Rice

Study build station data: LMS TV 2018-04-09

Proposal: K41FM D32 LD APP DEMING, NM
File number: K41FM32-160WBB
Facility ID: 35322
Station data: User record
Record ID: 2650
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Search options:

Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K17CM	N17z	TX	LIC	DUNCAN, ETC., AZ	BLTTTL19910812JH	177.4 km
No	K25DI-D	N25	TX	LIC	SILVER CITY, NM	BLTT19910325JS	93.3
No	KLCP-LP	N30	TX	LIC	LAS CRUCES, NM	BLTTTL19990419JD	83.0
No	K31GJ-D	D31	LD	LIC	ALAMOGORDO, NM	BLDPT20110825ACB	176.1
No	K31DR	D31	LD	LIC	CABALLO, NM	BLANK0000004964	93.6
No	K31DR	N31	TX	LIC	CABALLO, NM	BLTT20041021AEZ	93.6
Yes	K31KB-D	D31	LD	LIC	DEMING, NM	BLDPT20090709AKL	0.1
No	DK31HQ	D31	LD	APP	LORDSBURG, NM	BDFCDTT20090824ACZ	87.9
No	KOLD-TV	D32	DT	LIC	TUCSON, AZ	BLCDDT20030911AAI	292.8
No	K32KU-D	D32	LD	CP	HOBBS, NM	BNPDTL20101012AFB	421.6
No	K32LP-D	D32	LD	CP	MAGDALENA, NM	BNPDTL20100513AEC	164.5
No	KENW	D32	DT	LIC	PORTALES, NM	BLEDT20030219ADP	466.1
No	K33ME-D	D33	LD	CP	DEMING, NM	BNPDTL20100504ANB	49.8
No	K34FU	N34-	TX	LIC	ARREY & DERRY, NM	BLTT20040325ACF	93.6
No	XHCTCJ	D31	DT	LIC	CIUDAD JUAREZ, CH	BLANKBPFS20160525AAP	117.9
No	LICITACIOND31		DT	LIC	SAN BUENAVENTURA, CH	BLANKBPFS20090331ADP	261.7
No	XHAUC	D32	DT	LIC	CHIHUAHUA, CH	BLANKBPFS20160303AAF	422.8
No	XHIJ	D32	DT	LIC	CIUDAD JUAREZ, CH	BLANKBPFS20160304AAF	118.0
No	CADENATRES	D32	DT	LIC	CABORCA, SO	BLANKBPFS20160525ACD	460.7
No	XHJUB	D33	DT	LIC	CIUDAD JUAREZ, CH	BLANKBPFS20160304AAG	118.1
No	LICITACIOND33		DT	LIC	NUEVO CASAS GRANDES, CH	BLANKBPFS20160525AAQ	201.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D32

Mask: Stringent
Latitude: 32 11 40.30 N (NAD83)
Longitude: 107 36 31.10 W
Height AMSL: 1722.1 m (Adjusted based on actual ground elevation calculation)
HAAT: 0.0 m
Peak ERP: 0.160 kW
Antenna: SCA-CL-1483 (ID 20779) 300.0 deg
Elev Pattn: Generic

50.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.000 kW	419.6 m	3.9 km
45.0	0.000	448.2	4.0
90.0	0.000	465.5	4.0
135.0	0.000	442.7	4.0
180.0	0.000	62.3	2.2
225.0	0.000	365.4	3.8
270.0	0.070	418.3	30.2
315.0	0.121	419.2	33.3

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 380 m

Distance to Canadian border: 1867.9 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 45.7 km

Conditions at FCC monitoring station: Douglas AZ
Bearing: 248.8 degrees Distance: 207.9 km

Proposal is not within the West Virginia quiet zone area

INTERFERENCE ANALYSIS FOR PROPOSED K41FM, DEMING, NM, CHANNEL 32

Conditions at Table Mountain receiving zone:
Bearing: 12.8 degrees Distance: 905.6 km

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 BLDTT20090709AKL LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	K31KB-D	D31	LD	LIC	DEMING, NM	BLDTT20090709AKL				
Undesireds:	K41FM	D32	LD	APP	DEMING, NM	K41FM32-160WBB	0.1 km			
	K30KU-D	D30	LD	LIC	SILVER CITY, NM	BLDTT20110915ABI	93.4			
	K31DR	D31	LD	LIC	CABALLO, NM	BLANK000004964	93.5			
	DK31HQ	D31	LD	APP	LORDSBURG, NM	BDFCDTT20090824ACZ	87.9			
	XHCTCJ	D31	DT	LIC	CIUDAD JUAREZ, CH	BLANKBFFS20160525AAP	117.9			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	1502.0	22,279	1448.6	22,248	1264.6	21,933	1263.6	21,933	0.08	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
K41FM D32 LD APP		1.0	0		1.0	0				
K30KU-D D30 LD LIC		1.0	0	0.0	0	0				
K31DR D31 LD LIC		117.8	257	87.6	209	87.6	209			
DK31HQ D31 LD APP		1.0	21	0.0	0	0.0	0			
XHCTCJ D31 DT LIC		95.4	85	65.3	58	65.3	58			

Interference to BLDTT20090709AKL LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	K31KB-D	D31	LD	LIC	DEMING, NM	BLDTT20090709AKL				
Undesireds:	K41FM	D32	LD	APP	DEMING, NM	K41FM32-160WBB	0.1 km			
	K30KU-D	D30	LD	LIC	SILVER CITY, NM	BLDTT20110915ABI	93.4			
	K31DR	N31	TX	LIC	CABALLO, NM	BLTT20041021AEZ	93.5			
	DK31HQ	D31	LD	APP	LORDSBURG, NM	BDFCDTT20090824ACZ	87.9			
	XHCTCJ	D31	DT	LIC	CIUDAD JUAREZ, CH	BLANKBFFS20160525AAP	117.9			
	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX					
	1502.0	22,279	1448.6	22,248	1290.8	22,052	1289.8	22,052	0.08	0.00
Undesired			Total IX	Unique IX, before	Unique IX, after					
K41FM D32 LD APP		1.0	0		1.0	0				
K30KU-D D30 LD LIC		1.0	0	0.0	0	0.0	0			
K31DR N31 TX LIC		86.5	138	61.4	90	61.4	90			
DK31HQ D31 LD APP		1.0	21	0.0	0	0.0	0			
XHCTCJ D31 DT LIC		95.4	85	70.3	58	70.3	58			

Interference to proposal scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance	
	K41FM	D32	LD	APP	DEMING, NM	K41FM32-160WBB		
Undesireds:	K31DR	D31	LD	LIC	CABALLO, NM	BLANK000004964	93.6 km	
	K31KB-D	D31	LD	LIC	DEMING, NM	BLDTT20090709AKL	0.1	
	K33ME-D	D33	LD	CP	DEMING, NM	BNPDTL20100504ANB	49.8	
	XHIJ	D32	DT	LIC	CIUDAD JUAREZ, CH	BLANKBFFS20160304AAF	118.0	
	Service area	Terrain-limited	IX-free	Percent IX				
	808.8	21,405	787.6	21,353	672.1	21,227	14.67	0.59
Undesired			Total IX	Unique IX	Prcnt Unique IX			
K31KB-D D31 LD LIC		23.1	126	20.1	126	2.56	0.59	
K33ME-D D33 LD CP		3.0	0	1.0	0	0.13	0.00	
XHIJ D32 DT LIC		93.4	0	90.4	0	11.48	0.00	