

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: khax21s11, Model: Longley-Rice

Study build station data: LMS TV 2018-09-13 #263

Proposal: KHAX21S11 D21 LD STA VISTA, CA
File number: khax21s11
Facility ID: 70394
Station data: User record
Record ID: 3197
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	K14JT	N14	TX	LIC	JOSHUA TREE, ETC., CA	BLTVL19980330JH	148.9 km
No	KODG-LD	N17z	TX	LIC	PALM SPRINGS, CA	BLTTL20001219ABP	110.6
No	KCWQ-LD	D20	LD	CP	PALM SPRINGS, CA	BLANK0000052544	100.6
Yes	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688	62.2
No	K21EG-D	D21	LD	LIC	GOLDEN VALLEY, AZ	BLDTT20130308ABB	353.1
No	K21EA-D	D21	LD	LIC	LAKE HAVASU CITY, AZ	BLDTT20130308ABO	302.2
No	NEW	D21	LD	APP	PARKER, AZ	BNPDTL20100514ADI	280.6
No	KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	335.8
No	KRPO-LD	D21	LD	APP	QUARTZSITE, AZ	BPDTL20120606AAC	375.7
No	K21FU-D	D21	LD	LIC	TOPOCK, AZ	BLDTT20130308ACK	328.8
No	K21MN-D	D21	LD	CP	BAKERSFIELD, CA	BNPDTL20100514ABR	287.0
No	K21MH-D	D21	LD	LIC	Daggett, CA	BLANK0000004555	187.7
No	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	474.9
Yes	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	42.9
No	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	111.7
No	K21GI	N21+	TX	LIC	MORONGO VALLEY, CA	BLTT20050516AUD	111.7
Yes	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	100.6
No	K21IN-D	D21	LD	LIC	RIDGECREST, ETC., CA	BLDTT20090622AAK	255.9
No	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	73.6
Yes	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	294.4
Yes	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	295.5
No	K21AC	N21	TX	LIC	VICTORVILLE, ETC., CA	BLTT19820105IG	155.5
No	NEW	D21	LD	APP	WINTERHAVEN, CA	BNPDTL20100510AAG	215.1
No	KLSV-LD	D21	LD	CP	LAS VEGAS, NV	BLANK0000052473	369.2
No	NEW	D21	LD	APP	LUFKIN, TX	BMJADTL20100517AAU	167.4
No	KVYE	D22	DT	LIC	EL CENTRO, CA	BLCDT20070604ABN	220.4
No	KMRZ-LD	D22	LD	LIC	LOS ANGELES, CA	BLANK0000029037	139.6
No	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000034687	137.4
No	KJHP-LP	D22	LD	APP	MORONGO VALLEY, CA	BLANK0000052124	100.6
No	K12QV	D22+	LD	APP	SAN BERNARDINO, CA	BLANK0000054552	133.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
Mask: Simple
Latitude: 33 12 51.00 N (NAD83)
Longitude: 117 11 15.30 W
Height AMSL: 489.2 m
HAAT: 0.0 m
Peak ERP: 0.260 kW
Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.00

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.260 kW	344.6 m	36.9 km

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

45.0	0.260	221.8	31.8
90.0	0.260	81.8	21.7
135.0	0.260	248.6	33.1
180.0	0.260	271.0	34.1
225.0	0.260	375.8	38.0
270.0	0.260	402.8	38.9
315.0	0.260	372.4	37.9

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 290 m

Distance to Canadian border: 1749.6 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 73.3 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 321.8 degrees Distance: 649.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 50.7 degrees Distance: 1309.9 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 BLANK0000054688 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688			
Undesireds:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	62.2 km		
	KPBS	D19	DT	CP	SAN DIEGO, CA	BLANK0000027963	0.2		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
4419.6	2,254,660	4161.7	2,178,042	3660.9	1,916,778	3658.9	1,913,465	0.05	0.17
1807.1	1,611,769	1592.2	1,310,879	1440.6	810,886	1440.6	810,886	0.00	0.00 (in Mexico)
Undesired		Total IX		Unique IX, before		Unique IX, after			
KHAX21S11	D21 LD STA	3.0	3,313	2.0	3,313				
KPBS	D19 DT CP	500.8	261,264	500.8	261,264	499.8	261,264		
KPBS	D19 DT CP	151.6	499,993	151.6	499,993	151.6	499,993	(in Mexico)	

----- Interference to BLTTL20080813ABI APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI			
Undesireds:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	42.9 km		
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	79.2		
	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	47.3		
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	274.5		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
381.4	233,907	334.9	209,250	331.9	209,250	326.9	207,971	1.49	0.61
Undesired		Total IX		Unique IX, before		Unique IX, after			
KHAX21S11	D21 LD STA	7.9	1,279	5.0	1,279				
K21MO-D	D21 LD CP	3.0	0	3.0	0	0.0	0		

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

Interference to BLDTA20150209ABF LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	
Undesireds:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	100.6 km
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDDT20110607ABB	332.2
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	6336.1	550,229	4873.7	461,294	4872.7	461,294	0.16 0.01
Undesired				Total IX	Unique IX, before	Unique IX, after	
KHAX21S11 D21 LD STA		7.9		54		7.9	54
KPMR D21 DT LIC		1.0		0	1.0	1.0	0

Interference to BLDTA20150209ABF LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	
Undesireds:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	100.6 km
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDDT20120817ABD	333.3
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	6336.1	550,229	4873.7	461,294	4871.7	461,294	0.14 0.01
Undesired				Total IX	Unique IX, before	Unique IX, after	
KHAX21S11 D21 LD STA		7.9		54		6.9	54
KPMR D21 DT APP		2.0		0	2.0	1.0	0

Interference to BLCDDT20110607ABB LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDDT20110607ABB	
Undesireds:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	294.4 km
	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000034687	177.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	43404.1	1,758,463	33276.4	1,466,233	32673.0	1,446,851	0.01 0.05
Undesired				Total IX	Unique IX, before	Unique IX, after	
KHAX21S11 D21 LD STA		3.0		705		3.0	705
KFTV-DT D21 DT CP		558.5		5,111	557.5	5,111	
KHTV-CD D22 DC CP		45.8		14,271	44.8	14,271	

Interference to BPCDDT20120817ABD APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDDT20120817ABD	
Undesireds:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	295.5 km
	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000034687	178.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	42008.9	1,637,433	32729.3	1,437,756	32049.6	1,428,945	0.01 0.04
Undesired				Total IX	Unique IX, before	Unique IX, after	
KHAX21S11 D21 LD STA		3.0		547		2.0	547
KFTV-DT D21 DT CP		649.9		4,529	648.9	4,529	
KHTV-CD D22 DC CP		30.9		4,282	29.9	4,282	

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	
Undesireds:	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688	62.2 km
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTTL20080813ABI	42.9
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	111.7
	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	73.6
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	294.4

Service area	Terrain-limited	IX-free	Percent IX
3749.4 1,222,291	3241.9 927,553	3210.2 923,633	0.98 0.42

Undesired	Total IX	Unique IX	Prcnt Unique IX
KZSD-LP D20+ LD APP	5.0 2,089	4.0 2,089	0.12 0.23
DKDUG-LD N21+ TX APP	21.8 234	21.8 234	0.67 0.03
K21MO-D D21 LD CP	2.0 0	2.0 0	0.06 0.00
KPMR D21 DT LIC	4.0 1,597	3.0 1,597	0.09 0.17

Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KHAX21S11	D21	LD	STA	VISTA, CA	khax21s11	
Undesireds:	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688	62.2 km
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTTL20080813ABI	42.9
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	111.7
	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	73.6
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	295.5

Service area	Terrain-limited	IX-free	Percent IX
3749.4 1,222,291	3241.9 927,553	3211.1 923,633	0.95 0.42

Undesired	Total IX	Unique IX	Prcnt Unique IX
KZSD-LP D20+ LD APP	5.0 2,089	4.0 2,089	0.12 0.23
DKDUG-LD N21+ TX APP	21.8 234	21.8 234	0.67 0.03
K21MO-D D21 LD CP	2.0 0	2.0 0	0.06 0.00
KPMR D21 DT APP	3.0 1,597	2.0 1,597	0.06 0.17

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

tvstudy v2.2.5 (4uoc83)

Database: localhost, Study: khax21s12, Model: Longley-Rice

Study build station data: LMS TV 2018-09-13 #263

Proposal: KHAX21S12 D21 LD STA VISTA, CA
File number: khax21s12
Facility ID: 70394
Station data: User record
Record ID: 3198
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	K14JT	N14	TX	LIC	JOSHUA TREE, ETC., CA	BLTVL19980330JH	148.9 km
No	KODG-LD	N17z	TX	LIC	PALM SPRINGS, CA	BLTTL20001219ABP	110.6
No	KCWQ-LD	D20	LD	CP	PALM SPRINGS, CA	BLANK0000052544	100.6
Yes	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688	62.2
No	K21EG-D	D21	LD	LIC	GOLDEN VALLEY, AZ	BLDTT20130308ABB	353.1
No	K21EA-D	D21	LD	LIC	LAKE HAVASU CITY, AZ	BLDTT20130308ABO	302.2
No	NEW	D21	LD	APP	PARKER, AZ	BNPDTL20100514ADI	280.6
No	KRPO-LD	D21	LD	LIC	QUARTZSITE, AZ	BLDTL20110926AEA	335.8
No	KRPO-LD	D21	LD	APP	QUARTZSITE, AZ	BPDTL20120606AAC	375.7
No	K21FU-D	D21	LD	LIC	TOPOCK, AZ	BLDTT20130308ACK	328.8
No	K21MN-D	D21	LD	CP	BAKERSFIELD, CA	BNPDTL20100514ABR	287.0
No	K21MH-D	D21	LD	LIC	Daggett, CA	BLANK0000004555	187.7
No	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	474.9
Yes	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	42.9
No	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	111.7
No	K21GI	N21+	TX	LIC	MORONGO VALLEY, CA	BLTT20050516AUD	111.7
Yes	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	100.6
No	K21IN-D	D21	LD	LIC	RIDGECREST, ETC., CA	BLDTT20090622AAK	255.9
No	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	73.6
Yes	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	294.4
Yes	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	295.5
No	K21AC	N21	TX	LIC	VICTORVILLE, ETC., CA	BLTT19820105IG	155.5
No	NEW	D21	LD	APP	WINTERHAVEN, CA	BNPDTL20100510AAG	215.1
No	KLSV-LD	D21	LD	CP	LAS VEGAS, NV	BLANK0000052473	369.2
No	NEW	D21	LD	APP	LUFKIN, TX	BMJADTL20100517AAU	167.4
No	KVYE	D22	DT	LIC	EL CENTRO, CA	BLCDT20070604ABN	220.4
No	KMRZ-LD	D22	LD	LIC	LOS ANGELES, CA	BLANK0000029037	139.6
No	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000034687	137.4
No	KJHP-LP	D22	LD	APP	MORONGO VALLEY, CA	BLANK0000052124	100.6
No	K12QV	D22+	LD	APP	SAN BERNARDINO, CA	BLANK0000054552	133.1
No	XHENT	D20	DT	LIC	ENSENADA, BN	BLANKBPFS20111019ACE	157.9
No	XHILA	D20	DT	LIC	MEXICALI, BN	BLANKBPFS20160302ACO	167.0
No	XHFEC	D21	DT	LIC	SAN FELIPE, BN	BLANKBPFS20111004AAY	329.7
Yes	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	111.4
No	XHPPS	D21	DT	LIC	PUERTO PENASCO, SO	BLANKBPFS20111019ACQ	403.1
No	XHUAA	D22	DT	LIC	TIJUANA, BN	BLANKBPFS20100517ADE	80.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D21
Mask: Simple
Latitude: 33 12 51.00 N (NAD83)
Longitude: 117 11 15.30 W
Height AMSL: 489.2 m
HAAT: 0.0 m
Peak ERP: 0.260 kW

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

Antenna: Omnidirectional
Elev Pattn: Generic
Elec Tilt: 1.00

49.5 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.260 kW	344.6 m	36.9 km
45.0	0.260	221.8	31.8
90.0	0.260	81.8	21.7
135.0	0.260	248.6	33.1
180.0	0.260	271.0	34.1
225.0	0.260	375.8	38.0
270.0	0.260	402.8	38.9
315.0	0.260	372.4	37.9

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 290 m

Distance to Canadian border: 1749.6 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 73.3 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 321.8 degrees Distance: 649.6 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 50.7 degrees Distance: 1309.9 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 BLANK0000054688 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688			
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	62.2 km		
	KPBS	D19	DT	CP	SAN DIEGO, CA	BLANK0000027963	0.2		
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBFFS20160302ACX	49.6		

	Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX	
	4419.6	2,254,660	4161.7	2,178,042	3636.9	1,914,288	3634.9	1,910,975	0.05 0.17
	1807.1	1,611,769	1592.2	1,310,879	1418.5	806,495	1418.5	806,495	0.00 0.00 (in Mexico)

Undesired			Total IX		Unique IX, before		Unique IX, after		
KHAX21S12 D21 LD STA			3.0	3,313			2.0	3,313	
KPBS D19 DT CP			500.8	261,264	469.8	260,999	468.8	260,999	
KPBS D19 DT CP			151.6	499,993	146.6	486,587	146.6	486,587	(in Mexico)
XHDTV D21 DT LIC			54.9	2,755	24.0	2,490	24.0	2,490	
XHDTV D21 DT LIC			27.1	17,797	22.1	4,391	22.1	4,391	(in Mexico)

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

Interference to BLTTL20080813ABI APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	42.9 km
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	79.2
	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	47.3
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	274.5
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	151.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
381.4 233,907		334.9 209,250		309.1 195,026		306.1 194,986	0.96 0.02
Undesired		Total IX		Unique IX, before		Unique IX, after	
KHAX21S12 D21 LD STA		7.9 1,279				3.0 40	
K21MO-D D21 LD CP		3.0 0		0.0 0		0.0 0	
XHDTV D21 DT LIC		25.8 14,224		22.8 14,224		20.8 12,985	

Interference to BLDTA20150209ABF LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	100.6 km
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	332.2
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	174.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
6336.1 550,229		4873.7 461,294		4836.2 461,289		4830.2 461,235	0.12 0.01
Undesired		Total IX		Unique IX, before		Unique IX, after	
KHAX21S12 D21 LD STA		7.9 54				5.9 54	
KPMR D21 DT LIC		1.0 0		0.0 0		0.0 0	
XHDTV D21 DT LIC		37.5 5		36.5 5		34.6 5	

Interference to BLDTA20150209ABF LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K21DO-D	D21	DC	LIC	PALM SPRINGS, CA	BLDTA20150209ABF	
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	100.6 km
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	333.3
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	174.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
6336.1 550,229		4873.7 461,294		4836.2 461,289		4830.2 461,235	0.12 0.01
Undesired		Total IX		Unique IX, before		Unique IX, after	
KHAX21S12 D21 LD STA		7.9 54				5.9 54	
KPMR D21 DT APP		2.0 0		0.0 0		0.0 0	
XHDTV D21 DT LIC		37.5 5		35.6 5		34.6 5	

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

Interference to BLCDT20110607ABB LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	294.4 km
	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000034687	177.6
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	392.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
43404.1 1,758,463	33276.4 1,466,233	32615.5 1,445,272	32615.5 1,445,272	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KHAX21S12 D21 LD STA	3.0 705	0.0 0	
KFTV-DT D21 DT CP	558.5 5,111	557.5 5,111	557.5 5,111
KHTV-CD D22 DC CP	45.8 14,271	13.1 12,187	13.1 12,187
XHDTV D21 DT LIC	89.2 3,663	57.5 1,579	54.6 874

Interference to BPCDT20120817ABD APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	295.5 km
	KFTV-DT	D21	DT	CP	HANFORD, CA	BLANK0000034318	287.2
	KHTV-CD	D22	DC	CP	LOS ANGELES, CA	BLANK0000034687	178.6
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	393.2

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
42008.9 1,637,433	32729.3 1,437,756	32002.0 1,427,480	32002.0 1,427,480	0.00 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
KHAX21S12 D21 LD STA	3.0 547	0.0 0	
KFTV-DT D21 DT CP	649.9 4,529	648.9 4,529	648.9 4,529
KHTV-CD D22 DC CP	30.9 4,282	12.1 4,049	11.1 4,049
XHDTV D21 DT LIC	65.3 1,698	47.5 1,465	45.6 918

Interference to BLANKBPFS20160302ACX LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	
Undesireds:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	111.4 km
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	392.2
	XHENT	D20	DT	LIC	ENSENADA, BN	BLANKBPFS20111019ACE	49.0
	XHPPS	D21	DT	LIC	PUERTO PENASCO, SO	BLANKBPFS20111019ACQ	316.3
	XHUAA	D22	DT	LIC	TIJUANA, BN	BLANKBPFS20100517ADE	40.9
Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX			
13009.5 3,013,967	10018.2 2,734,142	9643.7 2,544,604	9096.3 2,262,892	5.68	11.07 (in U.S.)		
20904.2 2,104,676	17925.8 1,881,663	17637.2 1,563,921	17634.2 1,561,260	0.02	0.17		

Undesired	Total IX	Unique IX, before	Unique IX, after
KHAX21S12 D21 LD STA	700.1 344,018	547.5 281,712	(in U.S.)
KHAX21S12 D21 LD STA	5.0 11,548	3.0 2,661	
KPMR D21 DT LIC	29.9 34,737	22.9 27,255	2.0 231 (in U.S.)
XHENT D20 DT LIC	194.2 93,739	194.2 93,739	194.2 93,739
XHPPS D21 DT LIC	2.0 0	2.0 0	2.0 0
XHUAA D22 DT LIC	351.6 162,283	344.6 154,801	218.8 126,564 (in U.S.)
XHUAA D22 DT LIC	92.4 224,003	92.4 224,003	90.4 215,116

INTERFERENCE ANALYSIS FOR PROPOSED KHAX-LP, VISTA, CA, CHANNEL 21 (STA)

Interference to proposal scenario 1

**MX: 17.25% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	
Undesireds:	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688	62.2 km
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	42.9
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	111.7
	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	73.6
	KPMR	D21	DT	LIC	SANTA BARBARA, CA	BLCDT20110607ABB	294.4
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	111.4
	XHUAA	D22	DT	LIC	TIJUANA, BN	BLANKBPFS20100517ADE	80.4

	Service area		Terrain-limited		IX-free		Percent IX
	3749.4	1,222,291	3241.9	927,553	1945.3	767,516	40.00 17.25

Undesired			Total IX		Unique IX	Prcnt	Unique IX
KZSD-LP D20+ LD APP	5.0		2,089	1.0	0	0.03	0.00
DKDUG-LD N21+ TX APP	21.8		234	8.9	204	0.28	0.02
K21MO-D D21 LD CP	2.0		0	0.0	0	0.00	0.00
KPMR D21 DT LIC	4.0		1,597	0.0	0	0.00	0.00
XHDTV D21 DT LIC	1285.7		158,949	1256.8	143,979	38.77	15.52
XHUAA D22 DT LIC	8.0		12,138	1.0	884	0.03	0.10

Interference to proposal scenario 2

**MX: 17.25% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KHAX21S12	D21	LD	STA	VISTA, CA	khax21s12	
Undesireds:	KZSD-LP	D20+	LD	APP	SAN DIEGO, CA	BLANK0000054688	62.2 km
	DKDUG-LD	N21+	TX	APP	HEMET, CA	BLTTL20080813ABI	42.9
	K21GI	D21	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120109ACZ	111.7
	K21MO-D	D21	LD	CP	RIVERSIDE, CA	BNPDTL20090825AAL	73.6
	KPMR	D21	DT	APP	SANTA BARBARA, CA	BPCDT20120817ABD	295.5
	XHDTV	D21	DT	LIC	TECATE, BN	BLANKBPFS20160302ACX	111.4
	XHUAA	D22	DT	LIC	TIJUANA, BN	BLANKBPFS20100517ADE	80.4

	Service area		Terrain-limited		IX-free		Percent IX
	3749.4	1,222,291	3241.9	927,553	1945.3	767,516	40.00 17.25

Undesired			Total IX		Unique IX	Prcnt	Unique IX
KZSD-LP D20+ LD APP	5.0		2,089	1.0	0	0.03	0.00
DKDUG-LD N21+ TX APP	21.8		234	8.9	204	0.28	0.02
K21MO-D D21 LD CP	2.0		0	0.0	0	0.00	0.00
KPMR D21 DT APP	3.0		1,597	0.0	0	0.00	0.00
XHDTV D21 DT LIC	1285.7		158,949	1257.8	143,979	38.80	15.52
XHUAA D22 DT LIC	8.0		12,138	1.0	884	0.03	0.10
