

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-17-2008 Time: 10:57:58

Record Selected for Analysis

KTNE-D USERRECORD-01 ALLIANCE NE US
Channel 13 ERP 27. kW HAAT 467. m RCAMSL 01734 m
Latitude 041-50-27 Longitude 0103-03-18
Status APP Zone 2 Border
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	27.000	436.5	111.2
45.0	27.000	464.0	113.4
90.0	27.000	471.4	113.9
135.0	27.000	420.8	109.8
180.0	27.000	515.3	116.3
225.0	27.000	530.3	117.1
270.0	27.000	472.1	114.0
315.0	27.000	424.3	110.1

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KTNE-D 13 ALLIANCE NE USERRECORD01

and station

SHORT TO: KTNE-TV 13 ALLIANCE NE BDTV 1019
41 -50-24 103 -03-18
Req. separation 273.6 Actual separation 0.1 Short 273.5 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
13	KTNE-D	ALLIANCE NE	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
12	KRNE-TV	MERRIMAN NE	144.5	LIC	BDTV	-1033
13	KBDI-TV	BROOMFIELD CO	316.0	LIC	BDTV	-0232
13	KPSD-TV	EAGLE BUTTE SD	363.0	LIC	BDTV	-1420
13	KPLO-TV	RELIANCE SD	367.1	LIC	BDTV	-1435
13	KBDI-D.A	BROOMFIELD CO	316.0	APP	USERRECORD-02	
13	KPSD-D.C	EAGLE BUTTE SD	362.8	APP	USERRECORD-03	

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
12	KRNE-TV	MERRIMAN NE	BDTV	-1033

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
12	KSNK	MCCOOK NE	327.5	LIC	BDTV	-1032
12	KTTM	HURON SD	321.5	LIC	BDTV	-1422
12	KCWY	CASPER WY	379.8	LIC	BDTV	-1795
13	KPLO-TV	RELIANCE SD	222.6	LIC	BDTV	-1435
13	KTNE-D	ALLIANCE NE	144.5	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 12A NE MERRIMAN BDTV 1033 LIC
 HAAT 328.0 m, ATV ERP 15.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	33456	29742.4
not affected by terrain losses	28320	26985.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	435	144.3
lost to ATV IX only	435	144.3
lost to all IX	435	144.3

Potential Interfering Stations Included in above Scenario 1

12A NE MCCOOK	BDTV	1032	LIC
12A SD HURON	BDTV	1422	LIC

After Analysis

Results for: 12A NE MERRIMAN BDTV 1033 LIC
 HAAT 328.0 m, ATV ERP 15.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	33456	29742.4
not affected by terrain losses	28320	26985.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	512	577.1
lost to ATV IX only	512	577.1
lost to all IX	512	577.1

Potential Interfering Stations Included in above Scenario 1

12A NE MCCOOK	BDTV	1032	LIC
12A SD HURON	BDTV	1422	LIC
13A NE ALLIANCE	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1033
*Percent Service lost with proposal:	0.3	to BDTV	1033

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	KBDI-TV	BROOMFIELD CO	BDTV	-0232

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
13	KREY-TV	MONTROSE CO	241.0	LIC	BDTV	-0259
13	KGWR-TV	ROCK SPRINGS WY	362.3	LIC	BDTV	-1809
13	KTNE-D	ALLIANCE NE	316.0	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2
 Scenario 1 Affected station 2

Before Analysis

Results for: 13A CO BROOMFIELD BDTV 0232 LIC
 HAAT 730.0 m, ATV ERP 34.4 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3442664	43247.6
not affected by terrain losses	3043966	33599.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 13A CO BROOMFIELD BDTV 0232 LIC
 HAAT 730.0 m, ATV ERP 34.4 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3442664	43247.6
not affected by terrain losses	3043966	33599.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1613	160.1
lost to ATV IX only	1613	160.1
lost to all IX	1613	160.1

Potential Interfering Stations Included in above Scenario 1

13A NE ALLIANCE USERRECORD01 APP
 *Percent Service lost without proposal: 0.0 to BDTV 0232
 *Percent Service lost with proposal: 0.1 to BDTV 0232

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
13	KPSD-TV	EAGLE BUTTE SD	BDTV	-1420

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
12	KXMB-TV	BISMARCK ND	204.2	LIC	BDTV	-0991
13	KXMC-TV	MINOT ND	340.2	LIC	BDTV	-1010
13	KPLO-TV	RELIANCE SD	243.0	LIC	BDTV	-1435
13	KSGW-TV	SHERIDAN WY	385.6	LIC	BDTV	-1811
13	KTNE-D	ALLIANCE NE	363.0	APP	USERRECORD-01	

Total scenarios = 1

Result key: 3
 Scenario 1 Affected station 3
 Before Analysis

Results for: 13A SD EAGLE BUTTE BDTV 1420 LIC
 HAAT 518.0 m, ATV ERP 21.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	19819	40824.2
not affected by terrain losses	19079	38441.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	568	1268.1
lost to ATV IX only	568	1268.1
lost to all IX	568	1268.1

Potential Interfering Stations Included in above Scenario 1

13A ND MINOT	BDTV	1010	LIC
13A SD RELIANCE	BDTV	1435	LIC
13A WY SHERIDAN	BDTV	1811	LIC

After Analysis

Results for: 13A SD EAGLE BUTTE BDTV 1420 LIC
 HAAT 518.0 m, ATV ERP 21.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	19819	40824.2
not affected by terrain losses	19079	38441.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	578	1288.2
lost to ATV IX only	578	1288.2
lost to all IX	578	1288.2

Potential Interfering Stations Included in above Scenario 1

13A ND MINOT	BDTV	1010	LIC
13A SD RELIANCE	BDTV	1435	LIC
13A WY SHERIDAN	BDTV	1811	LIC
13A NE ALLIANCE	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1420
*Percent Service lost with proposal:	0.1	to BDTV	1420

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KPLO-TV	RELIANCE SD	BDTV -1435

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
12	KRNE-TV	MERRIMAN NE	222.6	LIC	BDTV -1033
12	KTTM	HURON SD	105.7	LIC	BDTV -1422
13	KFME	FARGO ND	387.2	LIC	BDTV -1002
13	KPSD-TV	EAGLE BUTTE SD	243.0	LIC	BDTV -1420
13	KSFY-TV	SIOUX FALLS SD	251.3	LIC	BDTV -1438
13	KTNE-D	ALLIANCE NE	367.1	APP	USERRECORD-01
13	KPSD-D.C	EAGLE BUTTE SD	243.0	APP	USERRECORD-03

Total scenarios = 2

Result key: 4
Scenario 1 Affected station 4
Before Analysis

Results for: 13A SD RELIANCE	BDTV	1435	LIC
HAAT 318.0 m, ATV ERP 40.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	56183	31241.4	
not affected by terrain losses	53474	30097.3	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	3584	2841.9	
lost to ATV IX only	3584	2841.9	
lost to all IX	3584	2841.9	

Potential Interfering Stations Included in above Scenario 1

12A SD HURON	BDTV	1422	LIC
13A ND FARGO	BDTV	1002	LIC
13A SD EAGLE BUTTE	BDTV	1420	LIC
13A SD SIOUX FALLS	BDTV	1438	LIC

After Analysis

Results for: 13A SD RELIANCE	BDTV	1435	LIC
HAAT 318.0 m, ATV ERP 40.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	56183	31241.4	
not affected by terrain losses	53474	30097.3	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	3585	2854.0	
lost to ATV IX only	3585	2854.0	
lost to all IX	3585	2854.0	

Potential Interfering Stations Included in above Scenario 1

12A SD HURON	BDTV	1422	LIC
13A ND FARGO	BDTV	1002	LIC
13A SD EAGLE BUTTE	BDTV	1420	LIC
13A SD SIOUX FALLS	BDTV	1438	LIC
13A NE ALLIANCE	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1435
*Percent Service lost with proposal:	0.0	to BDTV	1435

Result key: 5
Scenario 2 Affected station 4
Before Analysis

Results for: 13A SD RELIANCE	BDTV	1435	LIC
HAAT 318.0 m, ATV ERP 40.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	56183	31241.4	
not affected by terrain losses	53474	30097.3	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	3596	2938.3	
lost to ATV IX only	3596	2938.3	

lost to all IX 3596 2938.3

Potential Interfering Stations Included in above Scenario 2

12A SD HURON	BDTV	1422	LIC
13A ND FARGO	BDTV	1002	LIC
13A SD EAGLE BUTTE	USERRECORD03		APP
13A SD SIOUX FALLS	BDTV	1438	LIC

After Analysis

Results for: 13A SD RELIANCE BDTV 1435 LIC
HAAT 318.0 m, ATV ERP 40.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	56183	31241.4
not affected by terrain losses	53474	30097.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3597	2950.3
lost to ATV IX only	3597	2950.3
lost to all IX	3597	2950.3

Potential Interfering Stations Included in above Scenario 2

12A SD HURON	BDTV	1422	LIC
13A ND FARGO	BDTV	1002	LIC
13A SD EAGLE BUTTE	USERRECORD03		APP
13A SD SIOUX FALLS	BDTV	1438	LIC
13A NE ALLIANCE	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1435
*Percent Service lost with proposal:	0.0	to BDTV	1435

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KBDI-D.A	BROOMFIELD CO	USERRECORD-02

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
13	KREY-TV	MONTROSE CO	241.0	LIC	BDTV -0259
13	KGWR-TV	ROCK SPRINGS WY	362.3	LIC	BDTV -1809
13	KTNE-D	ALLIANCE NE	316.0	APP	USERRECORD-01

Total scenarios = 1

Result key: 6
Scenario 1 Affected station 5
Before Analysis

Results for: 13A CO BROOMFIELD USERRECORD02 APP
HAAT 747.0 m, ATV ERP 34.4 kW
POPULATION AREA (sq km)

within Noise Limited Contour	3453582	45303.0
not affected by terrain losses	3066117	35340.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 13A CO BROOMFIELD USERRECORD02 APP
 HAAT 747.0 m, ATV ERP 34.4 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3453582	45303.0
not affected by terrain losses	3066117	35340.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5587	172.2
lost to ATV IX only	5587	172.2
lost to all IX	5587	172.2

Potential Interfering Stations Included in above Scenario 1

13A NE ALLIANCE USERRECORD01 APP
 *Percent Service lost without proposal: 0.0 to USERRECORD02
 *Percent Service lost with proposal: 0.2 to USERRECORD02

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KPSD-D.C	EAGLE BUTTE SD	USERRECORD-03

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
12	KXMB-TV	BISMARCK ND	204.4	LIC	BDTV -0991
13	KXMC-TV	MINOT ND	340.4	LIC	BDTV -1010
13	KPLO-TV	RELIANCE SD	243.0	LIC	BDTV -1435
13	KSGW-TV	SHERIDAN WY	385.4	LIC	BDTV -1811
13	KTNE-D	ALLIANCE NE	362.8	APP	USERRECORD-01

Total scenarios = 1

Result key: 7
 Scenario 1 Affected station 6
 Before Analysis

Results for: 13A SD EAGLE BUTTE USERRECORD03 APP
 HAAT 516.0 m, ATV ERP 27.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	20890	42490.9

not affected by terrain losses	19473	40123.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	667	1344.7
lost to ATV IX only	667	1344.7
lost to all IX	667	1344.7

Potential Interfering Stations Included in above Scenario 1

13A ND MINOT	BDTV	1010	LIC
13A SD RELIANCE	BDTV	1435	LIC
13A WY SHERIDAN	BDTV	1811	LIC

After Analysis

Results for: 13A SD EAGLE BUTTE USERRECORD03 APP
 HAAT 516.0 m, ATV ERP 27.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	20890	42490.9
not affected by terrain losses	19473	40123.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	684	1372.9
lost to ATV IX only	684	1372.9
lost to all IX	684	1372.9

Potential Interfering Stations Included in above Scenario 1

13A ND MINOT	BDTV	1010	LIC
13A SD RELIANCE	BDTV	1435	LIC
13A WY SHERIDAN	BDTV	1811	LIC
13A NE ALLIANCE	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to USERRECORD03	
*Percent Service lost with proposal:	0.1	to USERRECORD03	

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application Ref. No.
13	KTNE-D	ALLIANCE NE	USERRECORD-01

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
12	KRNE-TV	MERRIMAN NE	144.5	LIC	BDTV -1033
13	KBDI-TV	BROOMFIELD CO	316.0	LIC	BDTV -0232
13	KPSD-TV	EAGLE BUTTE SD	363.0	LIC	BDTV -1420
13	KPLO-TV	RELIANCE SD	367.1	LIC	BDTV -1435
13	KBDI-D.A	BROOMFIELD CO	316.0	APP	USERRECORD-02
13	KPSD-D.C	EAGLE BUTTE SD	362.8	APP	USERRECORD-03

Total scenarios = 4

Result key: 8
 Scenario 1 Affected station 7

Before Analysis

Results for: 13A NE ALLIANCE USERRECORD01 APP
 HAAT 467.0 m, ATV ERP 27.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	102229	40380.2
not affected by terrain losses	96033	37359.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2045	2438.6
lost to ATV IX only	2045	2438.6
lost to all IX	2045	2438.6

Potential Interfering Stations Included in above Scenario 1

12A NE MERRIMAN	BDTV	1033	LIC
13A CO BROOMFIELD	BDTV	0232	LIC
13A SD EAGLE BUTTE	BDTV	1420	LIC
13A SD RELIANCE	BDTV	1435	LIC

Result key: 9
 Scenario 2 Affected station 7
 Before Analysis

Results for: 13A NE ALLIANCE USERRECORD01 APP
 HAAT 467.0 m, ATV ERP 27.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	102229	40380.2
not affected by terrain losses	96033	37359.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2053	2458.7
lost to ATV IX only	2053	2458.7
lost to all IX	2053	2458.7

Potential Interfering Stations Included in above Scenario 2

12A NE MERRIMAN	BDTV	1033	LIC
13A CO BROOMFIELD	BDTV	0232	LIC
13A SD EAGLE BUTTE	USERRECORD03		APP
13A SD RELIANCE	BDTV	1435	LIC

Result key: 10
 Scenario 3 Affected station 7
 Before Analysis

Results for: 13A NE ALLIANCE USERRECORD01 APP
 HAAT 467.0 m, ATV ERP 27.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	102229	40380.2
not affected by terrain losses	96033	37359.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2049	2450.7
lost to ATV IX only	2049	2450.7
lost to all IX	2049	2450.7

Potential Interfering Stations Included in above Scenario 3

12A NE MERRIMAN	BDTV	1033	LIC
13A CO BROOMFIELD	USERRECORD02		APP
13A SD EAGLE BUTTE	BDTV	1420	LIC
13A SD RELIANCE	BDTV	1435	LIC

Result key: 11
Scenario 4 Affected station 7
Before Analysis

Results for: 13A NE ALLIANCE USERRECORD01 APP
HAAT 467.0 m, ATV ERP 27.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	102229	40380.2
not affected by terrain losses	96033	37359.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2057	2470.8
lost to ATV IX only	2057	2470.8
lost to all IX	2057	2470.8

Potential Interfering Stations Included in above Scenario 4

12A NE MERRIMAN	BDTV	1033	LIC
13A CO BROOMFIELD	USERRECORD02		APP
13A SD EAGLE BUTTE	USERRECORD03		APP
13A SD RELIANCE	BDTV	1435	LIC

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