

# KOTA-DT, Rapid City, SD, OET-69 Interference Analysis

Percent allowed new interference: 0.500  
Percent allowed new interference to Class A: 0.500  
TW Census data selected 2000  
Post Transition Data Base Selected /export/home/cdbs/pt\_tvdb.sff

## TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-26-2009

Record Selected for Analysis

KOTADT USERRECORD-01 RAPID CITY SD US  
Channel 02 ERP 18.2 kW HAAT 205. m RCAMSL 01314 m  
Latitude 044-04-08 Longitude 0103-15-03  
Status APP Zone 2 Border  
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)	28.0 dBu F(50,90) (km)
0.0	18.200	261.7	110.1
45.0	18.200	330.5	114.8
90.0	18.200	339.8	115.0
135.0	18.200	321.0	114.4
180.0	18.200	161.3	98.8
225.0	18.200	67.5	81.7
270.0	18.200	46.7	75.1
315.0	18.200	110.5	91.1

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet 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

# KOTA-DT, Rapid City, SD, OET-69 Interference Analysis

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 Start of Interference Analysis

	Proposed Station			
Channel	Call	City/State	ARN	
02	KOTADT	RAPID CITY SD	USERRECORD01	

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	379.2	CP	BPCDT	-20080603ABQ
02	KNOP-TV	NORTH PLATTE NE	379.2	PLN	DTVPLN	-DTVP0004
02	K02NT	SCOTTSBLUFF NE	247.5	LIC	BLTVA	-20040622AAO

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	BPCDT	-20080603ABQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KOTA-TV	RAPID CITY SD	379.2	PLN	DTVPLN	-DTVP0006
02	KOTADT	RAPID CITY SD	379.2	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1  
 Scenario 1 Affected station 1  
 Before Analysis

Results for: 2A NE NORTH PLATTE BPCDT 20080603ABQ CP  
 HAAT 196.0 m, ATV ERP 16.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	88108	32475.6
not affected by terrain losses	87629	32074.4
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: 2A NE NORTH PLATTE BPCDT 20080603ABQ CP  
 HAAT 196.0 m, ATV ERP 16.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	88108	32475.6
not affected by terrain losses	87629	32074.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5	48.1
lost to ATV IX only	5	48.1
lost to all IX	5	48.1

Potential Interfering Stations Included in above Scenario 1

2A SD RAPID CITY USERRECORD01 APP

KOTA-DT, Rapid City, SD, OET-69 Interference Analysis

Percent new IX = 0.0057%

Worst case new IX 0.0057% Scenario 1

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
02	KNOP-TV	NORTH PLATTE NE	DTVPLN	-DTVP0004

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
02	KOTA-TV	RAPID CITY SD	379.2	PLN	DTVPLN	-DTVP0006
02	KOTADT	RAPID CITY SD	379.2	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2  
 Scenario 1 Affected station 2  
 Before Analysis

Results for: 2A NE NORTH PLATTE DTVPLN DTVP0004 PLN  
 HAAT 192.0 m, ATV ERP 6.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	68319	27507.0
not affected by terrain losses	67854	27033.6
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: 2A NE NORTH PLATTE DTVPLN DTVP0004 PLN  
 HAAT 192.0 m, ATV ERP 6.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	68319	27507.0
not affected by terrain losses	67854	27033.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5	32.1
lost to ATV IX only	5	32.1
lost to all IX	5	32.1

Potential Interfering Stations Included in above Scenario 1

2A SD RAPID CITY USERRECORD01 APP

Percent new IX = 0.0074%

Worst case new IX 0.0074% Scenario 1

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Analysis of Interference to Affected Station 3

KOTA-DT, Rapid City, SD, OET-69 Interference Analysis

Analysis of current record

Channel	Call	City/State	Application Ref. No.
02	K02NT	SCOTTSBLUFF NE	BLTVA -20040622AAO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
02	KNOP-TV	NORTH PLATTE NE	254.3	CP	BPCDT -20080603ABQ
02	KNOP-TV	NORTH PLATTE NE	254.3	PLN	DTVPLN -DTVP0004
02	KOTA-TV	RAPID CITY SD	247.5	PLN	DTVPLN -DTVP0006
02	KOTADT	RAPID CITY SD	247.5	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
02	KOTADT	RAPID CITY SD	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
02	KNOP-TV	NORTH PLATTE NE	379.2	CP	BPCDT -20080603ABQ
02	KNOP-TV	NORTH PLATTE NE	379.2	PLN	DTVPLN -DTVP0004

Total scenarios = 1

Result key: 3  
 Scenario 1 Affected station 4  
 Before Analysis

Results for: 2A SD RAPID CITY USERRECORD01 APP

HAAT 205.0 m, ATV ERP 18.2 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	161998	32509.9
not affected by terrain losses	161090	31761.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	178	24.0
lost to ATV IX only	178	24.0
lost to all IX	178	24.0

Potential Interfering Stations Included in above Scenario 1

2A NE NORTH PLATTE BPCDT 20080603ABQ CP

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