

MINOR CHANGE APPLICATION/
DIGITAL FLASH-CUT
RAPID BROADCASTING COMPANY
K40GS LPTV STATION
CH 40 - 626-632 MHZ - 4.0 KW
RAPID CITY, SOUTH DAKOTA
May 2012

EXHIBIT A

Percent allowed new interference: 0.500
Percent allowed new interference to non Class A LPTV: 2.000
Census data selected 2000
Data Base Selected
./data_files/pt_tvdb.sff
TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 05-07-2012 Time: 09:17:40

Record Selected for Analysis

K40GS USERRECORD-01 RAPID CITY SD US
Channel 40 ERP 4. kW HAAT 557. m RCAMSL 02265 m FULL SERVICE MASK
Latitude 044-19-42 Longitude 0103-50-03
Status APP Zone 1 Border Site number: 01
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Not full service station
Service Class = LD
Maximum height/power limits not checked

Site number	1			
Azimuth	ERP	HAAT	51.0 dBu F(50,90)	
(Deg)	(kW)	(m)	(km)	
0.0	3.834	721.9	61.2	
45.0	3.996	735.7	61.7	
90.0	3.968	601.3	58.8	
135.0	2.509	455.5	52.0	
180.0	0.462	368.6	39.2	
225.0	0.371	466.6	40.7	
270.0	0.210	505.2	38.5	
315.0	2.088	598.2	54.7	

Contour Overlap to Proposed Station

Contour Overlap Evaluation to Proposed Station Complete

NO LANDMOBILE SPACING VIOLATIONS FOUND

Checks to Site Number 01

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

Start of Interference Analysis

Channel 40 Proposed Station Call K40GS City/State RAPID CITY SD ARN USERRECORD01

Stations Potentially Affected by Proposed Station

Table with columns: Chan, Call, City/State, Dist(km), Status, Application Ref. No. Lists various stations like K33CO, K39LT-D, KZSD-TV, etc.

Analysis of Interference to Affected Station 1

Analysis of current record

Channel 33 Call K33CO City/State RAPID CITY SD Application Ref. No. BLTT -19950109JB

Stations Potentially Affecting This Station

Table with columns: Chan, Call, City/State, Dist(km), Status, Application Ref. No. Lists stations like KBHE-TV, K40GS.

Proposal causes no interference

Analysis of Interference to Affected Station 2

Analysis of current record

Channel 39 Call K39LT-D City/State PRINGLE SD Application Ref. No. BLDTT -20110923ABE

Stations Potentially Affecting This Station

Table with columns: Chan, Call, City/State, Dist(km), Status, Application Ref. No. Lists stations like KZSD-TV, K40MR-D, K40GS.

Proposal causes no interference

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
39	KZSD-TV	PRINGLE SD	BDRTEDT -20100617AAX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	K39LT-D	PRINGLE SD	0.0	LIC	BLD TT -20110923ABE
40	K40MR-D	CAPUTA SD	56.4	CP	BNPDTL -20100505AJA
40	K40GS	RAPID CITY SD	70.7	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.
40	K40MO-D	BILLINGS MT	BNPDTL -20100505AGW

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	K40GS	RAPID CITY SD	389.9	APP	USERRECORD-01

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	K40KQ-D	WYOLA MT	BNPDTL -20090825AKC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	KSRE	MINOT ND	253.5	LIC	BLEDT -20031104ABX
41	K41LO-D	GLEN DIVE JUNCTION MT	0.0	CP	BNPDTL -20090825ALQ
40	K40GS	RAPID CITY SD	314.3	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	NEW	BISMARCK ND	BNPDTL -20100609AHC

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	K39LJ-D	BISMARCK ND	10.1	CP	BNPDTL -20100505AME
40	KSRE	MINOT ND	145.7	LIC	BLEDT -20031104ABX
41	K41MG-D	STEELE ND	55.2	CP	BNPDTL -20100505AMC
40	K40GS	RAPID CITY SD	362.8	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel Call City/State Application Ref. No.
40 K40MR-D CAPUTA SD BNPDTL -20100505AJA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	K39LT-D	PRINGLE SD	56.4	LIC	BLD TT -20110923ABE
39	KZSD-TV	PRINGLE SD	56.4	APP	BDRTEDT -20100617AAX
40	K40GS	RAPID CITY SD	80.7	APP	USERRECORD-01

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 7
Before Analysis

Results for: 40A SD CAPUTA BNPDTL 20100505AJA CP
HAAT 179.0 m, ATV ERP 2.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	86247	4032.4
not affected by terrain losses	84274	3973.1
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: 40A SD CAPUTA BNPDTL 20100505AJA CP
HAAT 179.0 m, ATV ERP 2.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	86247	4032.4
not affected by terrain losses	84274	3973.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1510	1646.1
lost to ATV IX only	1510	1646.1
lost to all IX	1510	1646.1

Potential Interfering Stations Included in above Scenario 1

40A SD RAPID CITY USERRECORD01 APP

Percent new IX = 1.7918%

Worst case new IX 1.7918% Scenario 1

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel Call City/State Application Ref. No.
40 NEW RELIANCE SD BNPDTL -20100510AIX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	K40GS	RAPID CITY SD	339.7	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 9

Analysis of current record

Channel Call City/State Application Ref. No.
40 NEW CASPER WY BNPDTL -20101012AEX

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	KRMT	DENVER CO	360.8	LIC	BLEDT	-20061221ACX
40	KRMT	DENVER CO	360.8	CP	BPEDT	-20080619AAR
41	K41MD-D	CASPER WY	0.0	CP	BNPDTL	-20100324ACI
40	K40GS	RAPID CITY SD	268.2	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 10

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
40	K40MN-D	CHEYENNE WY	BNPDTL	-20100510AER

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	KRMT	DENVER CO	219.2	LIC	BLEDT	-20061221ACX
40	KRMT	DENVER CO	219.2	CP	BPEDT	-20080619AAR
40	KDEV-LP	CHEYENNE WY	45.8	LIC	BLTTL	-20070315AAI
40	K40GS	RAPID CITY SD	319.7	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 11

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
40	KDEV-LP	CHEYENNE WY	BLTTL	-20070315AAI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
38	KPJR-TV	GREELEY CO	116.7	LIC	BLCDT	-20090612ADP
39	KMAH-LP	CHEYENNE WY	16.9	LIC	BLTTL	-19981201JC
40	KRMT	DENVER CO	173.5	LIC	BLEDT	-20061221ACX
40	KRMT	DENVER CO	173.5	CP	BPEDT	-20080619AAR
40	K40MN-D	CHEYENNE WY	45.8	CP	BNPDTL	-20100510AER
43	KPXC-TV	DENVER CO	121.0	APP	BMPCDT	-20070104ACH
43	KPXC-TV	DENVER CO	116.7	LIC	BLCDT	-20080818ACR
40	K40GS	RAPID CITY SD	365.1	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 12

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
40	K40JU-D	CODY, POWELL * WY	BLDTT	-20081009AMQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
40	K40GS	RAPID CITY SD	399.0	APP	USERRECORD-01	

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 13

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	K40MQ-D	GILLETTE WY	BNPDTL -20100505AIR

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	K40GS	RAPID CITY SD	133.0	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 14

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	K40AQ-D	SHOSHONI WY	BLDTT -20110617ACI

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	K40GS	RAPID CITY SD	365.6	APP	USERRECORD-01

Proposed station is beyond the site to nearest cell evaluation distance

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Analysis of Interference to Affected Station 15

Analysis of current record

Channel	Call	City/State	Application Ref. No.
41	K41ML-D	MOORCROFT WY	BNPDTL -20100505AIL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
40	K40GS	RAPID CITY SD	72.3	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 16

Analysis of current record

Channel	Call	City/State	Application Ref. No.
40	K40GS	RAPID CITY SD	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
39	K39LT-D	PRINGLE SD	70.7	LIC	BLDTT -20110923ABE
39	KZSD-TV	PRINGLE SD	70.7	APP	BDRTEDT -20100617AAX
40	K40MR-D	CAPUTA SD	80.7	CP	BNPDTL -20100505AJA
40	K40MQ-D	GILLETTE WY	133.0	CP	BNPDTL -20100505AIR
41	K41ML-D	MOORCROFT WY	72.3	CP	BNPDTL -20100505AIL

Total scenarios = 1

Result key: 2
Scenario 1 Affected station 16
Before Analysis

Results for: 40A SD RAPID CITY

USERRECORD01

APP

HAAT 557.0 m, ATV ERP 4.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	77150	8317.3
not affected by terrain losses	57802	7514.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4000	420.7
lost to ATV IX only	4000	420.7
lost to all IX	4000	420.7

Potential Interfering Stations Included in above Scenario 1

40A SD CAPUTA BNPDTL 20100505AJA CP

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