

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

Date: 06-03-2012 Time: 09:53:37

Record Selected for Analysis

K21GQ USERRECORD-01 US
Channel 21 ERP 2.5 kW HAAT 90. m RCAMSL 00631 m STRINGENT MASK
Latitude 048-09-48 Longitude 0101-17-55
Status APP Zone 2 Border Site number: 01
Dir Antenna Make CDB Model 00000000016352 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	2.500	118.5	35.4
45.0	2.012	138.1	35.6
90.0	1.197	127.4	32.3
135.0	1.068	108.8	30.3
180.0	1.257	44.7	21.6
225.0	1.068	33.0	17.7
270.0	1.197	52.3	23.1
315.0	2.012	96.1	32.2

Contour Overlap to Proposed Station

Station
K21GQ 21 MINOT ND BLTTL20030825AMY

Station inside contour of Digital LPTV station
K21GQ 21 USERRECORD01

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 within the Canadian coordination distance
Distance to border = 93.0km

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
21	K21GQ		USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
21	K21KD-D	WYOLA MT	264.8	CP	BNPDTL	-20090825AKL
21	WDAY-TV	FARGO ND	332.9	LIC	BLCDT	-20061222ABH
21	NEW	GARRISON ND	60.3	APP	BNPDTL	-20100609AGQ
21	K21LG-D	TAPPEN ND	196.8	CP	BNPDTL	-20100505ALV
22	K22KG-D	BELFIELD ND	196.6	CP	BNPDTL	-20100506ACG
22	KBME-TV	BISMARCK ND	178.9	LIC	BLEDT	-20020122AAD

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	K21KD-D	WYOLA MT	BNPDTL	-20090825AKL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
21	KNBN	RAPID CITY SD	349.9	LIC	BLCDT	-20090206ACK
21	K21GQ		264.8	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	WDAY-TV	FARGO ND	BLCDT	-20061222ABH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	KJRE	ELLENDALE ND	149.5	LIC	BLEDT	-20041109AAB
21	K21GQ		332.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	NEW	GARRISON ND	BNPDTL	-20100609AGQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
21	WDAY-TV	FARGO ND	334.1	LIC	BLCDT	-20061222ABH
21	K21GQ	MINOT ND	60.3	LIC	BLTTL	-20030825AMY
22	KBME-TV	BISMARCK ND	129.7	LIC	BLEDT	-20020122AAD
21	K21GQ		60.3	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 3
Before Analysis

Results for: 21A ND GARRISON BNPDTL 20100609AGQ APP

HAAT 114.0 m, ATV ERP 5.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	8825	4216.6
not affected by terrain losses	8825	4210.6
lost to NTSC IX	20	9.9
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	20	9.9

Potential Interfering Stations Included in above Scenario 1

21N ND MINOT	BLTTL	20030825AMY	LIC
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After Analysis

Results for: 21A ND GARRISON BNPDTL 20100609AGQ APP

HAAT 114.0 m, ATV ERP 5.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	8825	4216.6
not affected by terrain losses	8825	4210.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	19	26.6
lost to ATV IX only	19	26.6
lost to all IX	19	26.6

Potential Interfering Stations Included in above Scenario 1

21A	USERRECORD01	APP
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Percent new IX = -0.0114%

Worst case new IX -0.0114% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	K21LG-D	TAPPEN ND	BNPDTL	-20100505ALV

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
20	KJRE	ELLENDALÉ ND	80.4	LIC	BLEDT -20041109AAB
21	WDAY-TV	FARGO ND	174.0	LIC	BLCDD -20061222ABH
21	NEW	GARRISON ND	176.2	APP	BNPDDL -20100609AGQ
22	KBME-TV	BISMARCK ND	105.3	LIC	BLEDT -20020122AAD
21	K21GQ		196.8	APP	USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
22	K22KG-D	BELFIELD ND	BNPDDL -20100506ACG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
22	KBME-TV	BISMARCK ND	180.2	LIC	BLEDT -20020122AAD
21	K21GQ		196.6	APP	USERRECORD-01

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
22	KBME-TV	BISMARCK ND	BLEDT -20020122AAD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
21	K21GQ		178.9	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.
21	K21GQ		USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
21	WDAY-TV	FARGO ND	332.9	LIC	BLCDD -20061222ABH
21	NEW	GARRISON ND	60.3	APP	BNPDDL -20100609AGQ

Total scenarios = 3

Result key: 2
Scenario 1 Affected station 7
Before Analysis

Results for: 21A USERRECORD01 APP

HAAT 90.0 m, ATV ERP 2.5 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	57189	3022.1
not affected by terrain losses	57189	3022.1
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

Result key: 3
Scenario 2 Affected station 7
Before Analysis

Results for: 21A USERRECORD01 APP

HAAT 90.0 m, ATV ERP 2.5 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	57189	3022.1
not affected by terrain losses	57189	3022.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	12	11.0
lost to ATV IX only	12	11.0
lost to all IX	12	11.0

Potential Interfering Stations Included in above Scenario 2

21A ND GARRISON BNPDTL 20100609AGQ APP

Result key: 4
Scenario 3 Affected station 7
Before Analysis

Results for: 21A USERRECORD01 APP

HAAT 90.0 m, ATV ERP 2.5 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	57189	3022.1
not affected by terrain losses	57189	3022.1
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 3

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED