

WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

TW Census data selected 2000

Post Transition Data Base Selected /export/home/cdbb/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 10-22-2008

Record Selected for Analysis

WJMNDT USERRECORD-01 ESCANABA MI US
Channel 48 ERP 1000. kW HAAT 346. m RCAMSL 00603 m
Latitude 046-08-05 Longitude 0086-56-55
Status APP Zone 2 Border
Dir Antenna Make usr Model S390 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)	41.0 dBu F(50,90) (km)
0.0	25.281	327.2	72.6
45.0	34.225	354.7	76.7
90.0	37.636	361.7	77.9
135.0	30.625	376.7	77.8
180.0	142.129	376.5	88.3
225.0	783.225	340.9	98.8
270.0	877.969	316.3	97.5
315.0	152.881	314.3	82.6

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 within the Canadian coordination distance
Distance to border = 155.6km

Proposed facility is beyond the Mexican coordination distance

WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
48	WJMNDT	ESCANABA MI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WFQX-TV	CADILLAC MI	212.7	LIC	BLCDDT	-20070214ACF
47	WFQX-TV	CADILLAC MI	212.7	PLN	DTVPLN	-DTVP1679
48	WAQP	SAGINAW MI	396.4	LIC	BLCDDT	-20060824ADS
48	WAQP	SAGINAW MI	396.4	PLN	DTVPLN	-DTVP1711
48	WBME-TV	RACINE WI	371.4	LIC	BMLCDDT	-20070823AED
48	WBME-TV	RACINE WI	347.0	PLN	DTVPLN	-DTVP1726
48	WBME-TV	RACINE WI	344.9	CP MOD	BMPCDDT	-20080620ACE

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
47	WFQX-TV	CADILLAC MI	BLCDDT	-20070214ACF

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
46	WBSF	BAY CITY MI	172.0	CP MOD	BMPCDDT	-20080620AGE
46	WBSF	BAY CITY MI	172.0	PLN	DTVPLN	-DTVP1648
47	WTTW	CHICAGO IL	380.5	LIC	BLEDT	-20020408ABK
47	WTTW	CHICAGO IL	380.5	PLN	DTVPLN	-DTVP1673
48	WJMN-TV	ESCANABA MI	212.7	PLN	DTVPLN	-DTVP1710
48	WAQP	SAGINAW MI	188.1	LIC	BLCDDT	-20060824ADS
48	WAQP	SAGINAW MI	188.1	PLN	DTVPLN	-DTVP1711
48	WJMNDT	ESCANABA MI	212.7	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.
47	WFQX-TV	CADILLAC MI	DTVPLN	-DTVP1679

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
46	WBSF	BAY CITY MI	172.0	CP MOD	BMPCDDT	-20080620AGE
46	WBSF	BAY CITY MI	172.0	PLN	DTVPLN	-DTVP1648

WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

47	WTTW	CHICAGO IL	380.5	LIC	BLEDT	-20020408ABK
47	WTTW	CHICAGO IL	380.5	PLN	DTVPLN	-DTVP1673
48	WJMN-TV	ESCANABA MI	212.7	PLN	DTVPLN	-DTVP1710
48	WAQP	SAGINAW MI	188.1	LIC	BLCDT	-20060824ADS
48	WAQP	SAGINAW MI	188.1	PLN	DTVPLN	-DTVP1711
48	WJMNDT	ESCANABA MI	212.7	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.
48	WAQP	SAGINAW MI	BLCDT	-20060824ADS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WFQX-TV	CADILLAC MI	188.1	LIC	BLCDT	-20070214ACF
47	WFQX-TV	CADILLAC MI	188.1	PLN	DTVPLN	-DTVP1679
48	WHME-TV	SOUTH BEND IN	250.1	LIC	BLCDT	-20060109ABG
48	WHME-TV	SOUTH BEND IN	250.1	PLN	DTVPLN	-DTVP1708
48	WHME-TV	SOUTH BEND IN	250.1	APP	BPCDT	-20080619ABC
48	WJMN-TV	ESCANABA MI	396.4	PLN	DTVPLN	-DTVP1710
48	WSYX-DR	COLUMBUS OH	375.0	APP	BPRM	-20080620AOV
48	WBME-TV	RACINE WI	310.6	LIC	BMLCDT	-20070823AED
48	WBME-TV	RACINE WI	312.2	PLN	DTVPLN	-DTVP1726
48	WBME-TV	RACINE WI	314.5	CP MOD	BMPCDT	-20080620ACE
49	WNWO-TV	TOLEDO OH	182.0	LIC	BLCDT	-20020403AAR
49	WNWO-TV	TOLEDO OH	182.0	PLN	DTVPLN	-DTVP1748
48	WJMNDT	ESCANABA MI	396.4	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.
48	WAQP	SAGINAW MI	DTVPLN	-DTVP1711

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WFQX-TV	CADILLAC MI	188.1	LIC	BLCDT	-20070214ACF
47	WFQX-TV	CADILLAC MI	188.1	PLN	DTVPLN	-DTVP1679
48	WHME-TV	SOUTH BEND IN	250.1	LIC	BLCDT	-20060109ABG
48	WHME-TV	SOUTH BEND IN	250.1	PLN	DTVPLN	-DTVP1708
48	WHME-TV	SOUTH BEND IN	250.1	APP	BPCDT	-20080619ABC
48	WJMN-TV	ESCANABA MI	396.4	PLN	DTVPLN	-DTVP1710
48	WSYX-DR	COLUMBUS OH	375.0	APP	BPRM	-20080620AOV
48	WBME-TV	RACINE WI	310.6	LIC	BMLCDT	-20070823AED
48	WBME-TV	RACINE WI	312.2	PLN	DTVPLN	-DTVP1726
48	WBME-TV	RACINE WI	314.5	CP MOD	BMPCDT	-20080620ACE

WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

49	WNWO-TV	TOLEDO OH	182.0	LIC	BLCDT	-20020403AAR
49	WNWO-TV	TOLEDO OH	182.0	PLN	DTVPLN	-DTVP1748
48	WJMNDT	ESCANABA MI	396.4	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.
48	WBME-TV	RACINE WI	BMLCDT	-20070823AED

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WTTW	CHICAGO IL	109.8	LIC	BLEDT	-20020408ABK
47	WTTW	CHICAGO IL	109.8	PLN	DTVPLN	-DTVP1673
48	WCIA	CHAMPAIGN IL	309.7	CP MOD	BMPCDT	-20050701ACC
48	WCIA	CHAMPAIGN IL	309.7	PLN	DTVPLN	-DTVP1706
48	WTTV	BLOOMINGTON IN	408.7	APP	BMPCDT	-20080619AKO
48	WTTV	BLOOMINGTON IN	408.7	PLN	DTVPLN	-DTVP1707
48	WTTV	BLOOMINGTON IN	408.7	CP	BPCDT	-20060707AFA
48	WTTV	BLOOMINGTON IN	408.7	LIC	BLCDT	-20060630ACD
48	WHME-TV	SOUTH BEND IN	197.0	LIC	BLCDT	-20060109ABG
48	WHME-TV	SOUTH BEND IN	197.0	PLN	DTVPLN	-DTVP1708
48	WHME-TV	SOUTH BEND IN	197.0	APP	BPCDT	-20080619ABC
48	WJMN-TV	ESCANABA MI	371.4	PLN	DTVPLN	-DTVP1710
48	WAQP	SAGINAW MI	310.6	LIC	BLCDT	-20060824ADS
48	WAQP	SAGINAW MI	310.6	PLN	DTVPLN	-DTVP1711
48	WXOW-DR	LA CROSSE WI	303.8	APP	BPRM	-20080620AOE
49	WMSN-DR	MADISON WI	139.3	APP	BPRM	-20080620AOW
48	WJMNDT	ESCANABA MI	371.4	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.
48	WBME-TV	RACINE WI	DTVPLN	-DTVP1726

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WTTW	CHICAGO IL	136.1	LIC	BLEDT	-20020408ABK
47	WTTW	CHICAGO IL	136.1	PLN	DTVPLN	-DTVP1673
48	WCIA	CHAMPAIGN IL	334.5	CP MOD	BMPCDT	-20050701ACC
48	WCIA	CHAMPAIGN IL	334.5	PLN	DTVPLN	-DTVP1706
48	WHME-TV	SOUTH BEND IN	218.9	LIC	BLCDT	-20060109ABG
48	WHME-TV	SOUTH BEND IN	218.9	PLN	DTVPLN	-DTVP1708
48	WHME-TV	SOUTH BEND IN	218.9	APP	BPCDT	-20080619ABC

WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

48	WJMN-TV	ESCANABA MI	347.0	PLN	DTVPLN	-DTVP1710
48	WAQP	SAGINAW MI	312.2	LIC	BLCDT	-20060824ADS
48	WAQP	SAGINAW MI	312.2	PLN	DTVPLN	-DTVP1711
48	WXOW-DR	LA CROSSE WI	290.9	APP	BPRM	-20080620AOE
49	WMSN-DR	MADISON WI	132.8	APP	BPRM	-20080620AOW
48	WJMNDT	ESCANABA MI	347.0	APP	USERRECORD-01	

Total scenarios = 28

Result key: 1
 Scenario 1 Affected station 6
 Before Analysis

Results for: 48A WI RACINE DTVPLN DTVP1726 PLN
 HAAT 303.0 m, ATV ERP 176.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2281922	17229.0
not affected by terrain losses	2281106	17180.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1615	76.5
lost to ATV IX only	1615	76.5
lost to all IX	1615	76.5

Potential Interfering Stations Included in above Scenario 1

48A IL CHAMPAIGN	BMPCDT	20050701ACC	CP
48A IN SOUTH BEND	BLCDT	20060109ABG	LIC
48A MI ESCANABA	DTVPLN	DTVP1710	PLN

After Analysis

Results for: 48A WI RACINE DTVPLN DTVP1726 PLN
 HAAT 303.0 m, ATV ERP 176.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2281922	17229.0
not affected by terrain losses	2281106	17180.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	1551	72.5
lost to ATV IX only	1551	72.5
lost to all IX	1551	72.5

Potential Interfering Stations Included in above Scenario 1

48A IL CHAMPAIGN	BMPCDT	20050701ACC	CP
48A IN SOUTH BEND	BLCDT	20060109ABG	LIC
48A MI ESCANABA	USERRECORD01		APP

Percent new IX = -0.0028%

Worst case new IX -0.0028% Scenario 1

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Analysis of Interference to Affected Station 7

Analysis of current record

WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

Channel	Call	City/State	Application	Ref. No.
48	WBME-TV	RACINE WI	BMPCDT	-20080620ACE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
47	WTTW	CHICAGO IL	139.1	LIC	BLEDT	-20020408ABK
47	WTTW	CHICAGO IL	139.1	PLN	DTVPLN	-DTVP1673
48	WCIA	CHAMPAIGN IL	336.9	CP MOD	BMPCDT	-20050701ACC
48	WCIA	CHAMPAIGN IL	336.9	PLN	DTVPLN	-DTVP1706
48	WHME-TV	SOUTH BEND IN	222.6	LIC	BLEDT	-20060109ABG
48	WHME-TV	SOUTH BEND IN	222.6	PLN	DTVPLN	-DTVP1708
48	WHME-TV	SOUTH BEND IN	222.6	APP	BPCDT	-20080619ABC
48	WJMN-TV	ESCANABA MI	344.9	PLN	DTVPLN	-DTVP1710
48	WAQP	SAGINAW MI	314.5	LIC	BLEDT	-20060824ADS
48	WAQP	SAGINAW MI	314.5	PLN	DTVPLN	-DTVP1711
48	WXOW-DR	LA CROSSE WI	287.8	APP	BPRM	-20080620AOE
49	WMSN-DR	MADISON WI	130.4	APP	BPRM	-20080620AOW
48	WJMNDT	ESCANABA MI	344.9	APP	USERRECORD-01	

Total scenarios = 28

Result key: 41
Scenario 13 Affected station 7
Before Analysis

Results for: 48A WI RACINE BMPCDT 20080620ACE CP

HAAT 298.0 m, ATV ERP 850.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2689429	22424.2
not affected by terrain losses	2683973	22275.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	46094	366.4
lost to ATV IX only	46094	366.4
lost to all IX	46094	366.4

Potential Interfering Stations Included in above Scenario 13

47A IL CHICAGO	BLEDT	20020408ABK	LIC
48A IN SOUTH BEND	BPCDT	20080619ABC	APP
48A WI LA CROSSE	BPRM	20080620AOE	APP
49A WI MADISON	BPRM	20080620AOW	APP
48A MI ESCANABA	DTVPLN	DTVP1710	PLN

After Analysis

Results for: 48A WI RACINE BMPCDT 20080620ACE CP

HAAT 298.0 m, ATV ERP 850.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2689429	22424.2
not affected by terrain losses	2683973	22275.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	46094	366.4
lost to ATV IX only	46094	366.4
lost to all IX	46094	366.4

Potential Interfering Stations Included in above Scenario 13

47A IL CHICAGO	BLEDT	20020408ABK	LIC
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WJMN-DT, Escanaba, MI, OET-69 Post-Transition Interference Analysis (worst-case scenarios)

48A IN SOUTH BEND	BPCDT	20080619ABC	APP
48A WI LA CROSSE	BPRM	20080620AOE	APP
49A WI MADISON	BPRM	20080620AOW	APP
48A MI ESCANABA	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 13

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application Ref. No.
48	WJMNDT	ESCANABA MI	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
47	WFQX-TV	CADILLAC MI	212.7	LIC	BLCDT -20070214ACF
47	WFQX-TV	CADILLAC MI	212.7	PLN	DTVPLN -DTVP1679
48	WAQP	SAGINAW MI	396.4	LIC	BLCDT -20060824ADS
48	WAQP	SAGINAW MI	396.4	PLN	DTVPLN -DTVP1711
48	WBME-TV	RACINE WI	371.4	LIC	BMLCDT -20070823AED
48	WBME-TV	RACINE WI	347.0	PLN	DTVPLN -DTVP1726
48	WBME-TV	RACINE WI	344.9	CP MOD	BMPCDT -20080620ACE

Total scenarios = 1

Result key: 57

Scenario 1 Affected station 8

Before Analysis

Results for: 48A MI ESCANABA USERRECORD01 APP
HAAT 346.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	161522	21695.2
not affected by terrain losses	156826	21619.2
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

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