

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

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
/export/home/cdbb/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-23-2012

Record Selected for Analysis

WHMB-TV USERRECORD-01 INDIANAPOLIS IN US
Channel 20 ERP 530. kW HAAT 297. m RCAMSL 00552 m
Latitude 039-53-40 Longitude 0086-12-21
Status APP Zone 1 Border Site number: 01
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 (site # 01) meets maximum height/power limits

Site number	1			
Azimuth	ERP	HAAT	41.0 dBu F(50,90)	
(Deg)	(kW)	(m)	(km)	
0.0	530.000	275.2	87.1	
45.0	530.000	295.9	90.4	
90.0	530.000	307.4	91.9	
135.0	530.000	312.3	92.5	
180.0	530.000	326.4	94.1	
225.0	530.000	302.5	91.3	
270.0	530.000	282.1	88.2	
315.0	530.000	274.7	87.0	

Evaluation toward Class A Stations from site # 01

No Spacing violations or contour overlap
to Class A stations from site # 01

Class A Evaluation Complete

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

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

Proposed facility is within the Canadian coordination distance
Distance to border = 342.1km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Call	City/State	ARN
20	WHMB-TV	INDIANAPOLIS IN	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WHAN-LP	SALEM IN	144.3	LIC	BLTTL	19941013JH
19	WUSI-TV	OLNEY IL	202.7	LIC	BLEDT	20060619ABG
19	WDNI-CD	INDIANAPOLIS IN	15.1	LIC	BLDTA	20090615ADH
20	WPVN-CD	AURORA IL	284.4	LIC	BLDTL	20100315ABN
20	WOTV	BATTLE CREEK MI	303.8	LIC	BLCDT	20030721AHS
20	WOTV	BATTLE CREEK MI	303.8	CP	BPCDT	20091104AEK
21	WFYI	INDIANAPOLIS IN	0.7	LIC	BLEDT	20100803ADB

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	WHAN-LP	SALEM IN	BLTTL	-19941013JH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
14	WTIU	BLOOMINGTON IN	69.8	CP	BPEDT	-20080620ACT
14	WTIU	BLOOMINGTON IN	69.8	LIC	BLEDT	-20030925AVS
16	WJYL-CD		34.1	APP	BSTA	-20081210AAZ
16	WJYL-CD	JEFFERSONVILLE IN	34.1	LIC	BLDTA	-20090630ADK
17	WAND-DR	DECATUR IL	279.9	APP	BPRM	-20101126ABC
17	WAND	DECATUR IL	279.9	LIC	BLCDT	-20111101AJG
17	WTCT	MARION IL	281.7	CP MOD	BMPCDT	-20011119AAX
17	WTCT	MARION IL	281.7	LIC	BLCDT	-20060629ACN
17	WAZE-LP	EVANSVILLE IN	148.1	LIC	BLTTL	-20000606ACN
17	WYIN	GARY IN	325.4	LIC	BLEDT	-20040206AAA
17	WKPC-TV	LOUISVILLE KY	34.2	LIC	BLEDT	-19990826KE
17	WQCW	PORTSMOUTH OH	337.3	LIC	BLCDT	-20100422ABY
17	WKOP-TV	KNOXVILLE TN	345.4	LIC	BLEDT	-20040405ACC
19	WBKI-TV	CAMPBELLSVILLE KY	131.4	LIC	BLCDT	-20080811ABA
20	WHMB-TV	INDIANAPOLIS IN	144.3	PLN	DTVPLN	-DTVP0708
21	WFYI	INDIANAPOLIS IN	144.8	LIC	BLEDT	-20100803ADB
24	WCVN-TV	COVINGTON KY	145.1	LIC	BLEDT	-20020201ABJ
25	WRTV	INDIANAPOLIS IN	144.8	LIC	BLCDT	-20090623ACJ
20	WHMB-TV	INDIANAPOLIS IN	144.3	APP	USERRECORD-01	

Proposed station is beyond the site to
nearest cell evaluation distance

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Analysis of Interference to Affected Station 2

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
19	WUSI-TV	OLNEY IL	BLEDT	-20060619ABG

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	WAND	DECATUR IL	137.7	CP MOD	BMPCDT	-20101223ABA
18	WAND	DECATUR IL	137.7	CP	BPCDT	-20091229AAS
19	WGN-TV	CHICAGO IL	340.5	LIC	BMLCDT	-20080201APP
19	WGN-TV	CHICAGO IL	340.5	APP	BPCDT	-20080619AFN
19	WHOI	PEORIA IL	237.0	LIC	BLCDT	-20090622AFB
19	WBKI-TV	CAMPBELLSVILLE KY	275.9	LIC	BLCDT	-20080811ABA
20	WHMB-TV	INDIANAPOLIS IN	202.7	PLN	DTVPLN	-DTVP0708
20	WHMB-TV	INDIANAPOLIS IN	202.7	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.
19	WDNI-CD	INDIANAPOLIS IN	BLDTA	-20090615ADH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
19	WGN-TV	CHICAGO IL	265.6	LIC	BMLCDT	-20080201APP
19	WGN-TV	CHICAGO IL	265.6	APP	BPCDT	-20080619AFN
19	WUSI-TV	OLNEY IL	206.3	LIC	BLEDT	-20060619ABG
19	WHOI	PEORIA IL	312.5	LIC	BLCDT	-20090622AFB
19	W19DT-D	FORT WAYNE IN	160.8	CP	BNPDTL	-20091228AAW
19	WBKI-TV	CAMPBELLSVILLE KY	258.1	LIC	BLCDT	-20080811ABA
19	WPXD-DR	ANN ARBOR MI	377.5	APP	BPRM	-20080619ALV
19	WXMI	GRAND RAPIDS MI	324.1	LIC	BLCDT	-20030117ABD
19	WXMI	GRAND RAPIDS MI	324.1	CP	BPCDT	-20080619AKI
19	WBQC-LP	CINCINNATI OH	154.9	CP	BDISTTL	-20090622AEZ
19	WVAH-TV	CHARLESTON WV	391.8	LIC	BLCDT	-20050621AAV
20	WHMB-TV	INDIANAPOLIS IN	15.1	PLN	DTVPLN	-DTVP0708
20	WHMB-TV	INDIANAPOLIS IN	15.1	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1

Scenario 1 Affected station 3

Before Analysis

Results for: 19A IN INDIANAPOLIS BLDTA 20090615ADH LIC

HAAT 165.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1464909	6487.8
not affected by terrain losses	1464909	6487.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	141567	2198.6
lost to ATV IX only	141567	2198.6
lost to all IX	141567	2198.6

Potential Interfering Stations Included in above Scenario 1

20A IN INDIANAPOLIS DTVPLN DTVP0708 PLN

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

After Analysis

Results for: 19A IN INDIANAPOLIS BLDTA 20090615ADH LIC
HAAT 165.0 m, ATV ERP 15.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1464909	6487.8
not affected by terrain losses	1464909	6487.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	141135	2174.6
lost to ATV IX only	141135	2174.6
lost to all IX	141135	2174.6

Potential Interfering Stations Included in above Scenario 1

20A IN INDIANAPOLIS USERRECORD01 APP

Percent new IX = -0.0326%

Worst case new IX -0.0326% Scenario 1

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	WPVN-CD	AURORA IL	BLDTL -20100315ABN

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
19	WGN-TV	CHICAGO IL	38.3	LIC	BMLCDT -20080201APP
19	WGN-TV	CHICAGO IL	38.3	APP	BPCDT -20080619AFN
20	NEW	CHILLICOTHE IL	184.3	APP	BNPDTL -20100510AGG
20	WHMB-TV	INDIANAPOLIS IN	284.4	PLN	DTVPLN -DTVP0708
20	WUVI-LD	WEST LAFAYETTE IN	86.9	LIC	BLDTL -20120207AAV
20	WOTV	BATTLE CREEK MI	219.6	LIC	BLCDT -20030721AHS
20	WOTV	BATTLE CREEK MI	219.6	CP	BPCDT -20091104AEK
20	WHA-TV	MADISON WI	166.0	LIC	BLEDT -20091229ACK
21	WYCC	CHICAGO IL	38.3	LIC	BLEDT -20030501ABC
20	WHMB-TV	INDIANAPOLIS IN	284.4	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.
20	WOTV	BATTLE CREEK MI	BLCDT -20030721AHS

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
19	WGN-TV	CHICAGO IL	194.3	LIC	BMLCDT -20080201APP
19	WGN-TV	CHICAGO IL	194.3	APP	BPCDT -20080619AFN
19	WPXD-DR	ANN ARBOR MI	176.9	APP	BPRM -20080619ALV
19	WXMI	GRAND RAPIDS MI	14.0	LIC	BLCDT -20030117ABD
19	WXMI	GRAND RAPIDS MI	14.0	CP	BPCDT -20080619AKI
20	WHMB-TV	INDIANAPOLIS IN	303.8	PLN	DTVPLN -DTVP0708
20	WHA-TV	MADISON WI	335.9	LIC	BLEDT -20091229ACK

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

21	WYCC	CHICAGO IL	192.4	LIC	BLEDT	-20030501ABC
21	WMYD	DETROIT MI	188.6	LIC	BLCDDT	-20040524AOG
21	WCMW	MANISTEE MI	180.3	LIC	BLEDT	-20090612ABH
20	WHMB-TV	INDIANAPOLIS IN	303.8	APP	USERRECORD-01	

Total scenarios = 2

Result key: 2
Scenario 1 Affected station 5
Before Analysis

Results for: 20A MI BATTLE CREEK BLCDDT 20030721AHS LIC
HAAT 311.0 m, ATV ERP 270.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2129025	25260.0
not affected by terrain losses	2128717	25248.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	10479	196.7
lost to ATV IX only	10479	196.7
lost to all IX	10479	196.7

Potential Interfering Stations Included in above Scenario 1

19A MI GRAND RAPIDS	BLCDDT	20030117ABD	LIC
20A IN INDIANAPOLIS	DTVPLN	DTVP0708	PLN

After Analysis

Results for: 20A MI BATTLE CREEK BLCDDT 20030721AHS LIC
HAAT 311.0 m, ATV ERP 270.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2129025	25260.0
not affected by terrain losses	2128717	25248.0
lost to NTSC IX	0	0.0
lost to additional IX by ATV	10479	196.7
lost to ATV IX only	10479	196.7
lost to all IX	10479	196.7

Potential Interfering Stations Included in above Scenario 1

19A MI GRAND RAPIDS	BLCDDT	20030117ABD	LIC
20A IN INDIANAPOLIS	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
20	WOTV	BATTLE CREEK MI	BPCDDT	-20091104AEK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
19	WGN-TV	CHICAGO IL	194.3	LIC	BMLCDDT	-20080201APP
19	WGN-TV	CHICAGO IL	194.3	APP	BPCDDT	-20080619AFN
19	WPXD-DR	ANN ARBOR MI	176.9	APP	BPRM	-20080619ALV
19	WXMI	GRAND RAPIDS MI	14.0	LIC	BLCDDT	-20030117ABD
19	WXMI	GRAND RAPIDS MI	14.0	CP	BPCDDT	-20080619AKI

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

20	WHMB-TV	INDIANAPOLIS IN	303.8	PLN	DTVPLN	-DTVP0708
20	WHA-TV	MADISON WI	335.9	LIC	BLEDT	-20091229ACK
21	WYCC	CHICAGO IL	192.4	LIC	BLEDT	-20030501ABC
21	WMYD	DETROIT MI	188.6	LIC	BLCDDT	-20040524AOG
21	WCMW	MANISTEE MI	180.3	LIC	BLEDT	-20090612ABH
20	WHMB-TV	INDIANAPOLIS IN	303.8	APP	USERRECORD-01	

Total scenarios = 2

Result key: 4
 Scenario 1 Affected station 6
 Before Analysis

Results for: 20A MI BATTLE CREEK BPCDT 20091104AEK CP
 HAAT 329.0 m, ATV ERP 255.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2191559	26144.4
not affected by terrain losses	2191493	26140.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9220	152.5
lost to ATV IX only	9220	152.5
lost to all IX	9220	152.5

Potential Interfering Stations Included in above Scenario 1

19A MI GRAND RAPIDS	BLCDDT	20030117ABD	LIC
20A IN INDIANAPOLIS	DTVPLN	DTVP0708	PLN

After Analysis

Results for: 20A MI BATTLE CREEK BPCDT 20091104AEK CP
 HAAT 329.0 m, ATV ERP 255.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2191559	26144.4
not affected by terrain losses	2191493	26140.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9220	152.5
lost to ATV IX only	9220	152.5
lost to all IX	9220	152.5

Potential Interfering Stations Included in above Scenario 1

19A MI GRAND RAPIDS	BLCDDT	20030117ABD	LIC
20A IN INDIANAPOLIS	USERRECORD01		APP

Percent new IX = 0.0000%

Worst case new IX 0.0000% Scenario 1

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
21	WFYI	INDIANAPOLIS IN	BLEDT	-20100803ADB

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
20	WHMB-TV	INDIANAPOLIS IN	0.7	PLN	DTVPLN	-DTVP0708
21	WYCC	CHICAGO IL	252.4	LIC	BLEDT	-20030501ABC
21	WMEC	MACOMB IL	388.9	LIC	BLEDT	-20031031ADO

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

21	WPXS	MOUNT VERNON IL	318.8	CP	BPCDT	-20080619AJO
21	WPXS	MOUNT VERNON IL	318.8	LIC	BLCDT	-20081103AAG
21	WUPX-TV	MOREHEAD KY	313.5	LIC	BLCDT	-20040901ACJ
21	WMYD	DETROIT MI	380.0	LIC	BLCDT	-20040524AOG
21	WBNS-TV	COLUMBUS OH	270.5	APP	BPCDT	-20080620ANA
21	WBNS-TV	COLUMBUS OH	270.5	LIC	BLCDT	-20021025ABK
21	WUXP-TV	NASHVILLE TN	407.4	LIC	BLCDT	-20060414AAU
22	WBUI	DECATUR IL	224.8	LIC	BLCDT	-20091119ACF
22	WSBT-TV	SOUTH BEND IN	190.9	LIC	BLCDT	-20090224ABF
22	WVUT	VINCENNES IN	176.9	LIC	BLEDT	-20090709AFJ
22	WCPO-TV	CINCINNATI OH	169.4	LIC	BLCDT	-20101216AAF
20	WHMB-TV	INDIANAPOLIS IN	0.7	APP	USERRECORD-01	

Total scenarios = 1

Result key: 6
 Scenario 1 Affected station 7
 Before Analysis

Results for: 21A IN INDIANAPOLIS BLEDT 20100803ADB LIC
 HAAT 251.0 m, ATV ERP 225.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2129088	20430.8
not affected by terrain losses	2127738	20378.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5118	99.9
lost to ATV IX only	5118	99.9
lost to all IX	5118	99.9

Potential Interfering Stations Included in above Scenario 1

21A IL CHICAGO	BLEDT	20030501ABC	LIC
21A IL MOUNT VERNON	BPCDT	20080619AJO	CP
21A KY MOREHEAD	BLCDT	20040901ACJ	LIC
20A IN INDIANAPOLIS	DTVPLN	DTVP0708	PLN

After Analysis

Results for: 21A IN INDIANAPOLIS BLEDT 20100803ADB LIC
 HAAT 251.0 m, ATV ERP 225.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2129088	20430.8
not affected by terrain losses	2127738	20378.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	4950	95.9
lost to ATV IX only	4950	95.9
lost to all IX	4950	95.9

Potential Interfering Stations Included in above Scenario 1

21A IL CHICAGO	BLEDT	20030501ABC	LIC
21A IL MOUNT VERNON	BPCDT	20080619AJO	CP
21A KY MOREHEAD	BLCDT	20040901ACJ	LIC
20A IN INDIANAPOLIS	USERRECORD01		APP

Percent new IX = -0.0079%

Worst case new IX -0.0079% Scenario 1

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Analysis of Interference to Affected Station 8

OET-69 Interference Analysis, WHMB-TV, Indianapolis, IN, Channel 20 (worst-case scenarios)

Analysis of current record

Channel	Call	City/State	Application Ref. No.
20	WHMB-TV	INDIANAPOLIS IN	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
19	WUSI-TV	OLNEY IL	202.7	LIC	BLEDT -20060619ABG
20	WOTV	BATTLE CREEK MI	303.8	LIC	BLCDT -20030721AHS
20	WOTV	BATTLE CREEK MI	303.8	CP	BPCDT -20091104AEK
21	WFYI	INDIANAPOLIS IN	0.7	LIC	BLEDT -20100803ADB

Total scenarios = 2

Result key: 7
Scenario 1 Affected station 8
Before Analysis

Results for: 20A IN INDIANAPOLIS USERRECORD01 APP
HAAT 297.0 m, ATV ERP 530.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2567333	27769.3
not affected by terrain losses	2551848	27553.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3458	12.0
lost to ATV IX only	3458	12.0
lost to all IX	3458	12.0

Potential Interfering Stations Included in above Scenario 1

20A MI BATTLE CREEK	BLCDT	20030721AHS	LIC
21A IN INDIANAPOLIS	BLEDT	20100803ADB	LIC

Result key: 8
Scenario 2 Affected station 8
Before Analysis

Results for: 20A IN INDIANAPOLIS USERRECORD01 APP
HAAT 297.0 m, ATV ERP 530.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	2567333	27769.3
not affected by terrain losses	2551848	27553.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3458	12.0
lost to ATV IX only	3458	12.0
lost to all IX	3458	12.0

Potential Interfering Stations Included in above Scenario 2

20A MI BATTLE CREEK	BPCDT	20091104AEK	CP
21A IN INDIANAPOLIS	BLEDT	20100803ADB	LIC

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