

TECHNICAL SUMMARY
APPLICATION FOR CONSTRUCTION PERMIT
TV STATION WMFD-TV
MANSFIELD, OHIO
CHANNEL 12 16.4 KW (DA) 180 m

1. *Purpose of Application:* It is proposed to change the WMFD-TV directional antenna system and increase the maximum ERP to 16.4 kW. No other changes are proposed including no change in the overall structure height of the existing tower (ASRN 1013230).

2. *City Coverage Compliance:* The instant modification application will provide the requisite city grade (43 dBu) signal to all of Mansfield (see Figure 1).

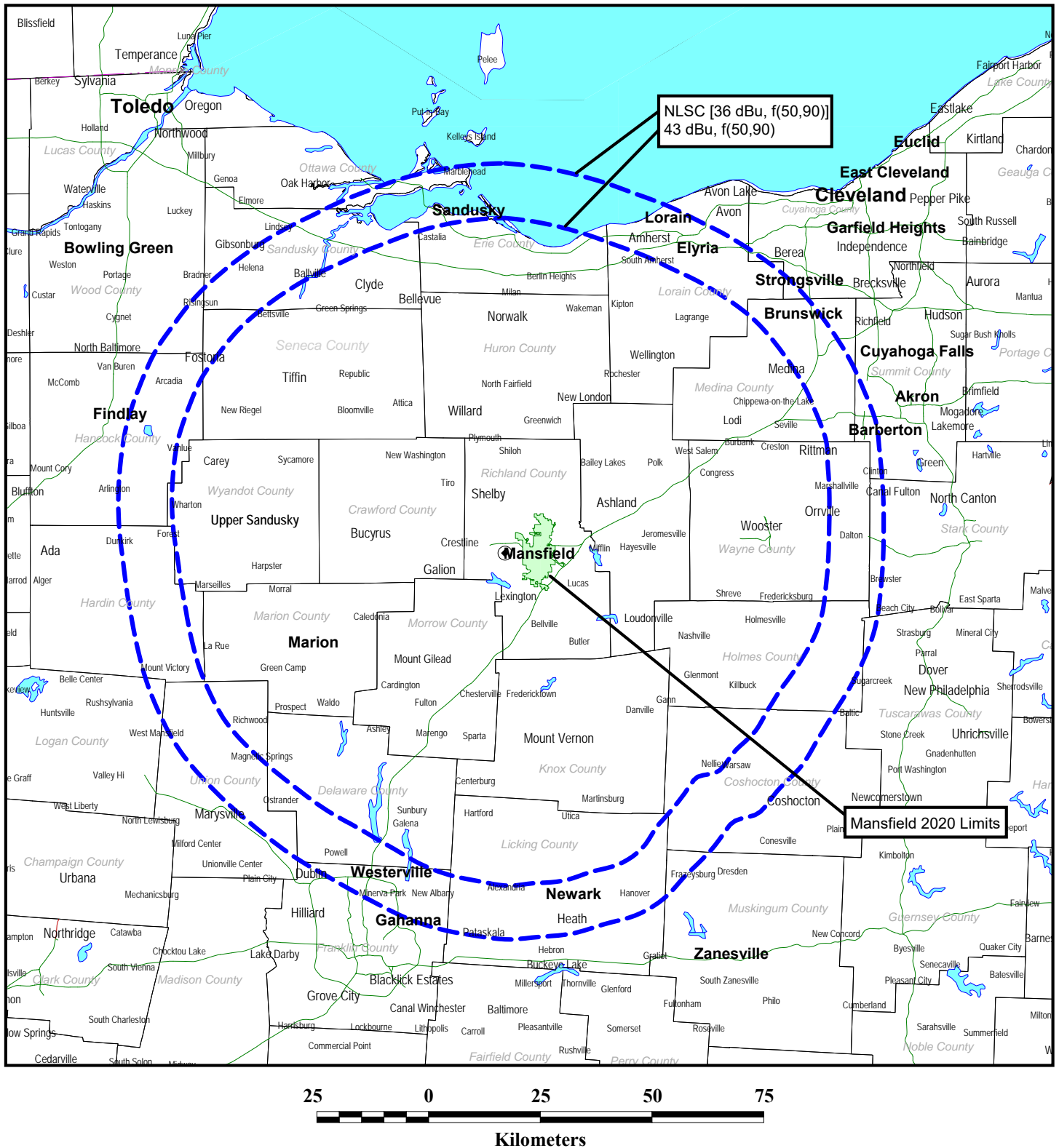
3. *Interference Compliance:* As indicated in the attached *TVStudy* analysis summaries, the proposed WMFD-TV operation meets the FCC's interference protection requirements with respect to all protected domestic and Canadian facilities.¹

4. *RFR Compliance:* The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed WMFD-TV antenna will be located 137 meters above ground level. The total DTV ERP is 16.4 kW (horizontal polarization only). A conservative vertical plane relative field value of 0.25 is presumed for the antenna's downward radiation (for angles below 60 degrees downward, see attached antenna vertical plane relative field pattern). The calculated power density at a point 2 meters above ground level is 2.7 uW/cm² which is 1.4% of the FCC's recommended limit of 200 uW/cm² for channel 12 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Also, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

¹ Two *TVStudy* analyses were run, one with US stations only (Figure 2A) and one with US and Canadian stations (Figure 2B). It is noted that the default terrain cell size of 2 km and a profile point spacing of 1 kilometer were used for the *TVStudy* analysis depicted in Figure 2A and a terrain cell size of 2 km and a profile point spacing of 0.1 km were used for the *TVStudy* analysis depicted on Figure 2B.

Figure 1



FCC PREDICTED COVERAGE CONTOURS

PROPOSED OPERATION
TV STATION WMFD-TV
MANSFIELD, OHIO
CH 12 16.4 KW (DA) 180 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

TVStudy Analysis - US Stations Only

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WMFD 16.4kW-DA S #433, Model: Longley-Rice
Start: 2023.04.21 14:17:08

Study created: 2023.04.21 14:17:07

Study build station data: LMS TV 2023-04-20

Proposal: WMFD-TV D12 DT APP MANSFIELD, OH
File number: WMFD 16.4kW-DA S
Facility ID: 41893
Station data: User record
Record ID: 433
Country: U.S.
Zone: I

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	119.4 km
No	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	221.3
No	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	436.7
No	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	436.7
Yes	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	219.3
Yes	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4
Yes	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	298.9
Yes	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	243.5
Yes	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	255.8
Yes	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8
Yes	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	121.9
No	WVFX	D13	DT	LIC	CLARKSBURG, WV	BLANK0000179139	252.8

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:
WRGM 1440 L DA2 D ONTARIO, OH BL19870709AD
WRGM 1440 L DA2 N ONTARIO, OH BL19870709AD

Record parameters as studied:

Channel: D12
Latitude: 40 45 50.00 N (NAD83)
Longitude: 82 37 4.00 W
Height AMSL: 558.0 m
HAAT: 180.0 m
Peak ERP: 16.4 kW
Antenna: KAT K5234527 Pane; 0.0 deg
Elev Pattn: Generic

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	10.7 kW	204.6 m	87.3 km
45.0	13.8	192.4	88.1
90.0	10.1	176.3	84.7
135.0	9.84	144.4	81.5
180.0	16.4	157.7	86.5
225.0	9.84	162.3	83.4
270.0	10.1	189.9	85.8
315.0	13.8	204.1	89.1

Database HAAT does not agree with computed HAAT
Database HAAT: 180 m Computed HAAT: 179 m

**Proposal is within coordination distance of Canadian border
Distance to Canadian border: 101.6 km

Distance to Mexican border: 2085.0 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 307.6 degrees Distance: 344.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 275.4 degrees Distance: 1907.9 km

Study cell size: 2.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLANK0000164536 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance	
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536		
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km	
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	119.4	
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4	
	WOIO	D10	DT	CP	SHAKER HEIGHTS, OH	BLANK0000035655	141.9	
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3	
	WBKB-TV	D11	DT	LIC	ALPENA, MI	BLCDT20090623AAS	337.0	
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4	
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	163.8	
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX	
	26816.1	4,487,440	26707.9	4,479,518	26148.8	4,450,366	0.08	0.02
	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
	Canada)							

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	171.2	2,294	171.2
WMFD-TV D12 DT APP	191.1	3,011	191.1
WILX-TV D10 DT LIC	327.6	19,827	251.6
WLFI-TV D11 DT LIC	16.0	244	0.0
WBKB-TV D11 DT LIC	20.1	1,921	0.0
WGVU-TV D11 DT LIC	136.3	12,540	52.2

Interference to BLANK0000164536 LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance	
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536		
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km	
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	119.4	
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4	
	WOIO	D10	DT	CP	SHAKER HEIGHTS, OH	BLANK0000035655	141.9	
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3	
	WBKB-TV	D11	DT	LIC	ALPENA, MI	BLCDT20090623AAS	337.0	
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4	
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	120.8	
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX	
	26816.1	4,487,440	26707.9	4,479,518	26136.7	4,447,035	0.08	0.02
	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
	Canada)							

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	171.2	2,294	171.2
WMFD-TV D12 DT APP	191.1	3,011	191.1
WILX-TV D10 DT LIC	327.6	19,827	251.6
WLFI-TV D11 DT LIC	16.0	244	0.0
WBKB-TV D11 DT LIC	20.1	1,921	0.0
WGVU-TV D11 DT LIC	136.3	12,540	40.1
WINM D12 DT LIC	28.2	3,424	12.1

Interference to BLANK0000164536 LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	

Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	119.4		
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4		
	WOIO	D10	DT	LIC	SHAKER HEIGHTS, OH	BLANK0000040178	143.7		
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3		
	WBKB-TV	D11	DT	LIC	ALPENA, MI	BLCDT20090623AAS	337.0		
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4		
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	163.8		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
26816.1	4,487,440	26707.9	4,479,518	26148.8	4,450,366	26128.9	4,449,649	0.08	0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	171.2	2,294	171.2	2,294		
WMFD-TV D12 DT APP	191.1	3,011			191.1	3,011
WILX-TV D10 DT LIC	327.6	19,827	251.6	14,318	251.6	14,318
WLFI-TV D11 DT LIC	16.0	244	0.0	0	0.0	0
WBKB-TV D11 DT LIC	20.1	1,921	0.0	0	0.0	0
WGVU-TV D11 DT LIC	136.3	12,540	52.2	6,184	52.2	6,184

Interference to BLANK0000164536 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536			
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	119.4		
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4		
	WOIO	D10	DT	LIC	SHAKER HEIGHTS, OH	BLANK0000040178	143.7		
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3		
	WBKB-TV	D11	DT	LIC	ALPENA, MI	BLCDT20090623AAS	337.0		
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	120.8		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
26816.1	4,487,440	26707.9	4,479,518	26136.7	4,447,035	26116.8	4,446,318	0.08	0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	171.2	2,294	171.2	2,294		
WMFD-TV D12 DT APP	191.1	3,011			191.1	3,011
WILX-TV D10 DT LIC	327.6	19,827	251.6	14,318	251.6	14,318
WLFI-TV D11 DT LIC	16.0	244	0.0	0	0.0	0
WBKB-TV D11 DT LIC	20.1	1,921	0.0	0	0.0	0
WGVU-TV D11 DT LIC	136.3	12,540	40.1	6,123	40.1	6,123
WINM D12 DT LIC	28.2	3,424	12.1	3,331	12.1	3,331

Interference to BLANK0000164536 LIC scenario 5

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536			
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	119.4		
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4		
	WOIO	D10	DT	APP	SHAKER HEIGHTS, OH	BLANK0000200945	141.9		
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3		
	WBKB-TV	D11	DT	LIC	ALPENA, MI	BLCDT20090623AAS	337.0		
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4		
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	163.8		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
26816.1	4,487,440	26707.9	4,479,518	26124.6	4,450,364	26104.7	4,449,647	0.08	0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	171.2	2,294	171.2	2,294		
WMFD-TV D12 DT APP	191.1	3,011			191.1	3,011

WILX-TV D10 DT LIC	327.6	19,827	251.6	14,318	251.6	14,318
WOIO D10 DT APP	24.2	2	24.2	2	24.2	2
WLFI-TV D11 DT LIC	16.0	244	0.0	0	0.0	0
WBKB-TV D11 DT LIC	20.1	1,921	0.0	0	0.0	0
WGVU-TV D11 DT LIC	136.3	12,540	52.2	6,184	52.2	6,184

Interference to BLANK0000164536 LIC scenario 6

	Call	Chan	Svc	Status	City, State	File Number	Distance		
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536			
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	119.4		
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4		
	WOIO	D10	DT	APP	SHAKER HEIGHTS, OH	BLANK0000200945	141.9		
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3		
	WBKB-TV	D11	DT	LIC	ALPENA, MI	BLCDT20090623AAS	337.0		
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	120.8		
	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
26816.1	4,487,440	26707.9	4,479,518	26112.4	4,447,033	26092.6	4,446,316	0.08	0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	171.2	2,294	171.2	2,294		
WMFD-TV D12 DT APP	191.1	3,011			191.1	3,011
WILX-TV D10 DT LIC	327.6	19,827	251.6	14,318	251.6	14,318
WOIO D10 DT APP	24.2	2	24.2	2	24.2	2
WLFI-TV D11 DT LIC	16.0	244	0.0	0	0.0	0
WBKB-TV D11 DT LIC	20.1	1,921	0.0	0	0.0	0
WGVU-TV D11 DT LIC	136.3	12,540	40.1	6,123	40.1	6,123
WINM D12 DT LIC	28.2	3,424	12.1	3,331	12.1	3,331

Interference to BLANK0000199518 APP scenario 1

Desired:	Call WINM	Chan D12	Svc DT	Status APP	City, State ANGOLA, IN	File Number BLANK0000199518	Distance		
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	219.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	219.3		
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	221.0		
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	254.1		
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	228.5		
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	155.1		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
23521.9	1,202,764	23124.2	1,179,469	20864.6	1,088,624	20760.4	1,086,446	0.50	0.20

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	968.8	31,555	441.2	9,083		
WMFD-TV D12 DT APP	1169.5	38,357			545.5	11,261
WBBM-TV D12 DT CP	1050.4	57,901	386.7	29,533	354.5	28,967
WJRT-TV D12 DT LIC	1050.5	40,615	357.8	8,807	337.7	8,572
WKRC-TV D12 DT LIC	336.8	11,486	180.4	6,742	172.4	6,674

Interference to BLANK0000199518 APP scenario 2

Desired:	Call WINM	Chan D12	Svc DT	Status APP	City, State ANGOLA, IN	File Number BLANK0000199518	Distance
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	219.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	219.3
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	221.0
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	254.1
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	228.5
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	155.1
	Service area			Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23521.9	1,202,764	23124.2	1,179,469	20904.7	1,085,256	20800.5 1,083,078	0.50 0.20

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	968.8	31,555	441.2	9,083
WMFD-TV D12 DT APP	1169.5	38,357		545.5
WBBM-TV D12 DT LIC	994.2	59,603	346.6	32,901
WJRT-TV D12 DT LIC	1050.5	40,615	373.9	10,473
WKRC-TV D12 DT LIC	336.8	11,486	180.4	6,742
				172.4
				6,674

Interference to BLCDT20130711ABN LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	198.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	198.4
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	120.8
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	239.9
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	206.7
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	261.1
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	118.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
20035.5	1,001,485	19321.1		971,031	16770.0	886,566	16693.7
							882,220
							0.46
							0.49

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	1496.7	55,312	542.9	15,452
WMFD-TV D12 DT APP	1665.5	62,775		619.2
WTOL D11 DT LIC	125.0	9,556	0.0	0
WBBM-TV D12 DT CP	940.0	33,963	93.0	4,415
WJRT-TV D12 DT LIC	1753.8	55,509	608.8	14,184
WKRC-TV D12 DT LIC	71.9	2,024	4.0	96
WTVG D13 DT LIC	270.0	15,940	28.2	1,752
				16.1
				740

Interference to BLCDT20130711ABN LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	198.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	198.4
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	120.8
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	239.9
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	206.7
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	261.1
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	118.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
20035.5	1,001,485	19321.1		971,031	16782.2	886,731	16701.8
							882,348
							0.48
							0.49

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	1496.7	55,312	534.9	15,198
WMFD-TV D12 DT APP	1665.5	62,775		615.2
WTOL D11 DT LIC	125.0	9,556	0.0	0
WBBM-TV D12 DT LIC	755.8	30,299	80.9	4,250
WJRT-TV D12 DT LIC	1753.8	55,509	745.0	17,053
WKRC-TV D12 DT LIC	71.9	2,024	4.0	96
WTVG D13 DT LIC	270.0	15,940	28.2	1,752
				16.1
				740

Interference to BLANK0000185925 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	298.9
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	329.1
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	254.1
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
31627.7	2,788,684	30871.0		2,543,446	30173.0	2,449,675	30144.9
							2,442,580
							0.09
							0.29

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	112.3	31,300	12.1	2,973
WMFD-TV D12 DT APP	172.4	43,204		40.1 10,068
WBBM-TV D12 DT CP	116.3	4,181	16.0	274 16.0 274
WINM D12 DT APP	658.0	89,037	457.4	57,254 445.4 53,463
WICU-TV D12 DT LIC	28.0	4,611	4.0	107 0.0 0
WZZM D13 DT LIC	7.9	805	4.0	458 4.0 458

Interference to BLANK0000185925 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	298.9
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	329.1
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	254.1
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
31627.7 2,788,684		30871.0		2,543,446		30160.9 2,442,854	0.09 0.29

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	112.3	31,300	12.1	2,973
WMFD-TV D12 DT APP	172.4	43,204		40.1 10,068
WBBM-TV D12 DT LIC	28.1	817	0.0	0 0.0 0
WINM D12 DT APP	658.0	89,037	525.7	60,024 513.7 56,233
WICU-TV D12 DT LIC	28.0	4,611	4.0	107 0.0 0
WZZM D13 DT LIC	7.9	805	4.0	458 4.0 458

Interference to BLANK0000185925 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	298.9
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	329.1
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	206.7
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
31627.7 2,788,684		30871.0		2,543,446		30297.6 2,467,372	0.09 0.29

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	112.3	31,300	20.1	4,416
WMFD-TV D12 DT APP	172.4	43,204		48.2 11,511
WBBM-TV D12 DT CP	116.3	4,181	20.0	383 20.0 383
WINM D12 DT LIC	501.3	63,722	304.8	32,462 292.7 28,671
WICU-TV D12 DT LIC	28.0	4,611	0.0	0 0.0 0
WZZM D13 DT LIC	7.9	805	4.0	458 4.0 458

Interference to BLANK0000185925 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	298.9
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	329.1
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	206.7
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
31627.7 2,788,684		30871.0		2,543,446		30317.6 2,467,755	0.09 0.29

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	112.3	31,300	20.1	4,416
WMFD-TV D12 DT APP	172.4	43,204		48.2 11,511

WBBM-TV D12 DT LIC	28.1	817	0.0	0	0.0	0
WINM D12 DT LIC	501.3	63,722	369.0	35,123	357.0	31,332
WICU-TV D12 DT LIC	28.0	4,611	0.0	0	0.0	0
WZZM D13 DT LIC	7.9	805	4.0	458	4.0	458

Interference to BLANK0000157760 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	243.5 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	243.5
	WHAS-TV	D11	DT	LIC	LOUISVILLE, KY	BLANK0000197250	144.0
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	228.5
	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	300.7
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	170.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
29368.6 3,281,914		28242.7 3,229,223		27452.9 3,164,128		27205.3 3,156,020	0.90 0.26
Undesired		Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL		269.1 31,574		79.8 3,476			
WMFD-TV D12 DT APP		565.2 47,703				327.4 11,584	
WHAS-TV D11 DT LIC		48.1 1,432		4.0 3		4.0 3	
WINM D12 DT APP		493.8 56,547		244.7 24,343		196.2 16,322	
WEHT D12 DT LIC		272.0 9,175		168.1 3,640		168.1 3,640	

Interference to BLANK0000157760 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	243.5 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	243.5
	WHAS-TV	D11	DT	LIC	LOUISVILLE, KY	BLANK0000197250	144.0
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	228.5
	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	300.7
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	170.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
29368.6 3,281,914		28242.7 3,229,223		27452.9 3,164,128		27205.3 3,156,020	0.90 0.26
Undesired		Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL		269.1 31,574		79.8 3,476			
WMFD-TV D12 DT APP		565.2 47,703				327.4 11,584	
WHAS-TV D11 DT LIC		48.1 1,432		4.0 3		4.0 3	
WINM D12 DT APP		493.8 56,547		240.7 24,312		192.2 16,291	
WEHT D12 DT LIC		272.0 9,175		168.1 3,640		168.1 3,640	
WTHR D13 DT APP		4.0 31		0.0 0		0.0 0	

Interference to BLANK0000157760 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	243.5 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	243.5
	WHAS-TV	D11	DT	LIC	LOUISVILLE, KY	BLANK0000197250	144.0
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	261.1
	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	300.7
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	170.0
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
29368.6 3,281,914		28242.7 3,229,223		27593.3 3,184,020		27321.4 3,169,409	0.99 0.46
Undesired		Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL		269.1 31,574		127.8 5,214			
WMFD-TV D12 DT APP		565.2 47,703				399.7 19,825	
WHAS-TV D11 DT LIC		48.1 1,432		4.0 3		4.0 3	
WINM D12 DT LIC		249.6 30,839		104.3 4,451		80.0 2,933	
WEHT D12 DT LIC		272.0 9,175		223.9 7,718		223.9 7,718	

Interference to BLANK0000157760 LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	243.5 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	243.5
	WHAS-TV	D11	DT	LIC	LOUISVILLE, KY	BLANK0000197250	144.0
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	261.1
	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	300.7
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	170.0

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	29368.6	3,281,914	28242.7	3,229,223	27593.3	3,184,020	27321.4 3,169,409 0.99 0.46

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	269.1	31,574	127.8	5,214		
WMFD-TV D12 DT APP	565.2	47,703			399.7	19,825
WHAS-TV D11 DT LIC	48.1	1,432	4.0	3	4.0	3
WINM D12 DT LIC	249.6	30,839	100.3	4,420	76.1	2,902
WEHT D12 DT LIC	272.0	9,175	223.9	7,718	223.9	7,718
WTHR D13 DT APP	4.0	31	0.0	0	0.0	0

Interference to BLANK0000074553 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	255.8 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	255.8
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	306.8

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	18948.9	740,115	17617.3	683,435	17411.3	676,219	17387.1 676,078 0.14 0.02
	6181.5	54,853	6181.5	54,853	6181.5	54,853	6181.5 54,853 0.00 0.00 (in

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	193.8	7,063	165.6	6,431		
WMFD-TV D12 DT APP	218.0	7,204			189.7	6,572
WBOY-TV D12 DT LIC	40.4	785	12.1	153	12.1	153

Interference to BLANK0000003150 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	254.8 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	254.8
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	137.0
	WBAL-TV	D12	DT	LIC	BALTIMORE, MD	BLANK0000136441	316.4
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	359.9
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	306.8
	WVFX	D13	DT	LIC	CLARKSBURG, WV	BLANK0000179139	2.1

	Service area	Terrain-limited		IX-free, before		IX-free, after	Percent New IX
	26747.7	711,302	23988.4	621,367	23691.8	610,049	23711.9 610,267 -0.08 -0.04

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	164.5	4,825	152.4	3,923		
WMFD-TV D12 DT APP	144.4	4,607			132.4	3,705
WPCW D11 DT LIC	20.2	1,349	20.2	1,349	20.2	1,349
WBAL-TV D12 DT LIC	35.7	673	35.7	673	35.7	673
WKRC-TV D12 DT LIC	4.0	110	0.0	0	0.0	0
WICU-TV D12 DT LIC	16.1	1,266	8.1	474	8.1	474
WVFX D13 DT LIC	68.1	3,997	68.1	3,997	68.1	3,997

Interference to BLANK0000143483 LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	

Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	121.9		
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	161.6		
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	303.8		
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25918.0	4,405,350	25793.7	4,397,113	25313.4	4,353,251	25293.5	4,352,971	0.08	0.01
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	51.7	386	51.7	386		
WMFD-TV D12 DT APP	71.7	666			71.7	666
WTHR D13 DT LIC	52.3	2,161	36.2	1,062	36.2	1,062
WZZM D13 DT LIC	392.3	42,414	376.3	41,315	376.3	41,315

Interference to BLANK0000143483 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483			
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	121.9		
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	161.6		
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8		
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25918.0	4,405,350	25793.7	4,397,113	25188.3	4,349,698	25168.4	4,349,418	0.08	0.01
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	51.7	386	51.7	386		
WMFD-TV D12 DT APP	71.7	666			71.7	666
WTHR D13 DT APP	189.4	5,977	161.3	4,615	161.3	4,615
WZZM D13 DT LIC	392.3	42,414	364.3	41,052	364.3	41,052

Interference to BLANK0000143483 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483			
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	121.9		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3		
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	303.8		
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1		
Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25918.0	4,405,350	25793.7	4,397,113	25309.4	4,353,209	25289.4	4,352,929	0.08	0.01
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00	0.00 (in
Canada)									

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	51.7	386	51.7	386		
WMFD-TV D12 DT APP	71.7	666			71.7	666
WINM D12 DT LIC	16.1	114	4.0	42	4.0	42
WTHR D13 DT LIC	52.3	2,161	32.2	1,038	32.2	1,038
WZZM D13 DT LIC	392.3	42,414	376.3	41,315	376.3	41,315

Interference to BLANK0000143483 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance		
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483			
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	121.9		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3		
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8		

WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLC DT20100726AKV	273.1		
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25918.0	4,405,350	25793.7	4,397,113	25188.3	4,349,698	25168.4	4,349,418	0.08 0.01
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00 0.00 (in

Undesired	Total IX		Unique IX, before		Unique IX, after	
WMFD-TV D12 DT BL	51.7	386	51.7	386		
WMFD-TV D12 DT APP	71.7	666			71.7	666
WINM D12 DT LIC	16.1	114	0.0	0	0.0	0
WTHR D13 DT APP	189.4	5,977	153.3	4,549	153.3	4,549
WZZM D13 DT LIC	392.3	42,414	364.3	41,052	364.3	41,052

Interference to proposal scenario 1 [Note: The applicant agrees to accept interference from the WINM application, if necessary]
**MX: 17.18% interference received

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	
Undesireds: WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	119.4 km
WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	219.3
WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	298.9
WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	243.5
WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	255.8
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8
WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	121.9

Service area	Terrain-limited		IX-free		Percent IX	
23147.0	1,897,506	22001.4	1,620,988	20928.4	1,342,562	4.88 17.18

Undesired	Total IX		Unique IX		Prct Unique IX	
WTOL D11 DT LIC	279.2	12,041	20.2	2,824	0.09	0.17
WINM D12 DT APP	391.2	111,867	60.3	2,002	0.27	0.12
WJRT-TV D12 DT LIC	182.1	54,428	4.0	1,557	0.02	0.10
WKRC-TV D12 DT LIC	330.3	167,060	128.9	77,687	0.59	4.79
WICU-TV D12 DT LIC	221.8	70,907	60.4	22,225	0.27	1.37
WBOY-TV D12 DT LIC	265.3	63,302	88.4	6,863	0.40	0.42
WTVG D13 DT LIC	299.4	19,461	40.5	10,244	0.18	0.63

Interference to proposal scenario 2
17.10% interference received

Call	Chan	Svc	Status	City, State	File Number	Distance
Desired: WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA S	
Undesireds: WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	119.4 km
WINM	D12	DT	LIC	ANGOLA, IN	BLC DT20130711ABN	198.4
WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	298.9
WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	243.5
WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	255.8
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8
WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	121.9

Service area	Terrain-limited		IX-free		Percent IX	
23147.0	1,897,506	22001.4	1,620,988	20940.6	1,343,747	4.82 17.10

Undesired	Total IX		Unique IX		Prct Unique IX	
WTOL D11 DT LIC	279.2	12,041	20.2	2,824	0.09	0.17
WINM D12 DT LIC	282.1	61,568	48.1	817	0.22	0.05
WJRT-TV D12 DT LIC	182.1	54,428	8.1	1,859	0.04	0.11
WKRC-TV D12 DT LIC	330.3	167,060	181.3	103,693	0.82	6.40
WICU-TV D12 DT LIC	221.8	70,907	68.6	23,100	0.31	1.43
WBOY-TV D12 DT LIC	265.3	63,302	76.4	6,598	0.35	0.41
WTVG D13 DT LIC	299.4	19,461	40.5	10,244	0.18	0.63

TVStudy Analysis - US & Canadian Stations

tvstudy v2.2.5 (4uoc83)
Database: localhost, Study: WMFD 16.4kW-DA US&Canada, Model: Longley-Rice
Start: 2023.04.21 14:25:40

Study created: 2023.04.21 14:25:39

Study build station data: LMS TV 2023-04-20

Proposal: WMFD-TV D12 DT APP MANSFIELD, OH
File number: WMFD 16.4kW-DA US&Canada
Facility ID: 41893
Station data: User record
Record ID: 434
Country: U.S.
Zone: I

Search options:

Non-U.S. records included

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	119.4 km
No	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	221.3
No	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	436.7
No	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	436.7
Yes	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	219.3
Yes	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4
Yes	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	298.9
Yes	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	243.5
Yes	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	255.8
Yes	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8
Yes	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	121.9
No	WVPX	D13	DT	LIC	CLARKSBURG, WV	BLANK0000179139	252.8[

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:

WRGM 1440 L DA2 D ONTARIO, OH BL19870709AD
WRGM 1440 L DA2 N ONTARIO, OH BL19870709AD

Record parameters as studied:

Channel: D12
Latitude: 40 45 50.00 N (NAD83)
Longitude: 82 37 4.00 W
Height AMSL: 558.0 m
HAAT: 180.0 m
Peak ERP: 16.4 kW
Antenna: KAT K5234527 Pane; 0.0 deg
Elev Pattn: Generic

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	10.7 kW	204.6 m	87.3 km
45.0	13.8	192.4	88.1
90.0	10.1	176.3	84.7
135.0	9.84	144.4	81.5
180.0	16.4	157.7	86.5
225.0	9.84	162.3	83.4
270.0	10.1	189.9	85.8
315.0	13.8	204.1	89.1

Database HAAT does not agree with computed HAAT
Database HAAT: 180 m Computed HAAT: 179 m

**Proposal is within coordination distance of Canadian border
Distance to Canadian border: 101.6 km

Distance to Mexican border: 2085.0 km

Conditions at FCC monitoring station: Allegan MI
Bearing: 307.6 degrees Distance: 344.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 275.4 degrees Distance: 1907.9 km

Study cell size: 2.00 km
Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLANK0000164536 LIC scenario 1

Desired:	Call WTOL	Chan D11	Svc DT	Status LIC	City, State TOLEDO, OH	File Number BLANK0000164536	Distance		
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	119.4		
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4		
	WOIO	D10	DT	CP	SHAKER HEIGHTS, OH	BLANK0000035655	141.9		
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3		
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4		
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	310.5		
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	163.8		
	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
26816.1	4,487,440	26663.8	4,472,142	26132.7	4,446,563	26092.9	4,445,717	0.15	0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
Canada)									

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	167.2	2,248	167.2
WMFD-TV D12 DT APP	207.0	3,094	207.0
WILX-TV D10 DT LIC	291.6	16,875	243.6
WOIO D10 DT CP	8.1	0	0.0
WLFI-TV D11 DT LIC	8.0	158	0.0
WGVU-TV D11 DT LIC	108.1	10,889	56.2
WPCW D11 DT LIC	12.1	2	4.0

Interference to BLANK0000164536 LIC scenario 2

Desired:	Call WTOL	Chan D11	Svc DT	Status LIC	City, State TOLEDO, OH	File Number BLANK0000164536	Distance		
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km		
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	119.4		
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4		
	WOIO	D10	DT	CP	SHAKER HEIGHTS, OH	BLANK0000035655	141.9		
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3		
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4		
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	310.5		
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	120.8		
	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX
26816.1	4,487,440	26663.8	4,472,142	26108.4	4,442,869	26068.6	4,442,023	0.15	0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6	391,578	0.00	0.00 (in
Canada)									

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	167.2	2,248	167.2
WMFD-TV D12 DT APP	207.0	3,094	207.0
WILX-TV D10 DT LIC	291.6	16,875	243.6
WOIO D10 DT CP	8.1	0	0.0
WLFI-TV D11 DT LIC	8.0	158	0.0
WGVU-TV D11 DT LIC	108.1	10,889	52.1
WPCW D11 DT LIC	12.1	2	4.0
WINM D12 DT LIC	32.3	3,742	24.2

Interference to BLANK0000164536 LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	119.4
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4
	WOIO	D10	DT	LIC	SHAKER HEIGHTS, OH	BLANK0000040178	143.7
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	310.5
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	163.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26816.1	4,487,440	26663.8	4,472,142	26132.7	4,446,563	26092.9 4,445,717	0.15 0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6 391,578	0.00 0.00 (in
Canada)							
Undesired			Total IX		Unique IX, before		Unique IX, after
WMFD-TV D12 DT BL			167.2	2,248	167.2	2,248	
WMFD-TV D12 DT APP			207.0	3,094		207.0 3,094	
WILX-TV D10 DT LIC			291.6	16,875	243.6 12,440	243.6 12,440	
WLFI-TV D11 DT LIC			8.0	158	0.0 0	0.0 0	
WGVU-TV D11 DT LIC			108.1	10,889	56.2 6,438	56.2 6,438	
WPCW D11 DT LIC			12.1	2	12.1 2	12.1 2	

Interference to BLANK0000164536 LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	119.4
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4
	WOIO	D10	DT	LIC	SHAKER HEIGHTS, OH	BLANK0000040178	143.7
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	310.5
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	120.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26816.1	4,487,440	26663.8	4,472,142	26108.4	4,442,869	26068.6 4,442,023	0.15 0.02
4684.6	391,578	4684.6	391,578	4684.6	391,578	4684.6 391,578	0.00 0.00 (in
Canada)							
Undesired			Total IX		Unique IX, before		Unique IX, after
WMFD-TV D12 DT BL			167.2	2,248	167.2	2,248	
WMFD-TV D12 DT APP			207.0	3,094		207.0 3,094	
WILX-TV D10 DT LIC			291.6	16,875	243.6 12,440	243.6 12,440	
WLFI-TV D11 DT LIC			8.0	158	0.0 0	0.0 0	
WGVU-TV D11 DT LIC			108.1	10,889	52.1 6,406	52.1 6,406	
WPCW D11 DT LIC			12.1	2	12.1 2	12.1 2	
WINM D12 DT LIC			32.3	3,742	24.2 3,694	24.2 3,694	

Interference to BLANK0000164536 LIC scenario 5

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	119.4
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4
	WOIO	D10	DT	APP	SHAKER HEIGHTS, OH	BLANK0000200945	141.9
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	310.5
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	163.8
Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
26816.1	4,487,440	26663.8	4,472,142	26104.4	4,446,308	26064.6 4,445,462	0.15 0.02

4684.6 391,578 4684.6 391,578 4684.6 391,578 4684.6 391,578 0.00 0.00 (in
Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	167.2	2,248	167.2	2,248
WMFD-TV D12 DT APP	207.0	3,094		207.0 3,094
WILX-TV D10 DT LIC	291.6	16,875	243.6	12,440 243.6 12,440
WOIO D10 DT APP	40.4	257	28.3	255 28.3 255
WLFI-TV D11 DT LIC	8.0	158	0.0	0 0.0 0
WGVU-TV D11 DT LIC	108.1	10,889	56.2	6,438 56.2 6,438
WPCW D11 DT LIC	12.1	2	0.0	0 0.0 0

Interference to BLANK0000164536 LIC scenario 6

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	119.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	119.4
	WILX-TV	D10	DT	LIC	ONONDAGA, MI	BLCDT20120404ACG	130.4
	WOIO	D10	DT	APP	SHAKER HEIGHTS, OH	BLANK0000200945	141.9
	WLFI-TV	D11	DT	LIC	LAFAYETTE, IN	BLCDT20040520AIX	306.3
	WGVU-TV	D11	DT	LIC	GRAND RAPIDS, MI	BLEDT20100827ABE	251.4
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	310.5
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	120.8

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
26816.1	4,487,440	26663.8	4,472,142	26080.2 4,442,614	0.15 0.02
4684.6	391,578	4684.6	391,578	4684.6 391,578	0.00 0.00 (in Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	167.2	2,248	167.2	2,248
WMFD-TV D12 DT APP	207.0	3,094		207.0 3,094
WILX-TV D10 DT LIC	291.6	16,875	243.6	12,440 243.6 12,440
WOIO D10 DT APP	40.4	257	28.3	255 28.3 255
WLFI-TV D11 DT LIC	8.0	158	0.0	0 0.0 0
WGVU-TV D11 DT LIC	108.1	10,889	52.1	6,406 52.1 6,406
WPCW D11 DT LIC	12.1	2	0.0	0 0.0 0
WINM D12 DT LIC	32.3	3,742	24.2	3,694 24.2 3,694

Interference to BLANK0000199518 APP scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	219.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	219.3
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	221.0
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	254.1
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	228.5
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	155.1

	Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
23521.9	1,202,764	22935.0	1,172,070	20723.4 1,085,184	0.41 0.17

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	957.0	28,903	425.1	9,121
WMFD-TV D12 DT APP	1101.6	32,188		509.4 10,932
WBBM-TV D12 DT CP	998.1	55,387	342.3	29,947 314.2 29,544
WJRT-TV D12 DT LIC	1018.6	34,343	357.9	9,866 341.8 9,577
WKRC-TV D12 DT LIC	364.8	11,807	168.5	6,537 168.5 6,537

Interference to BLANK0000199518 APP scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	219.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	219.3
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	221.0
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	254.1

WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	228.5	
WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	155.1	
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
23521.9	1,202,764	22935.0	1,172,070	20751.6	1,083,926	20667.3	1,082,115
Undesired	Total IX		Unique IX, before		Unique IX, after		
WMFD-TV D12 DT BL	957.0	28,903	425.1	9,121			
WMFD-TV D12 DT APP	1101.6	32,188			509.4	10,932	
WBBM-TV D12 DT LIC	954.0	57,836	314.2	31,205	286.1	30,802	
WJRT-TV D12 DT LIC	1018.6	34,343	370.0	9,650	353.9	9,361	
WKRC-TV D12 DT LIC	364.8	11,807	176.5	6,569	176.5	6,569	

Interference to BLCDDT20130711ABN LIC scenario 1

**IX: 1.05% interference caused

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDDT20130711ABN	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	198.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	198.4
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	120.8
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	239.9
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	206.7
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	261.1
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	118.3
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
20035.5	1,001,485	19224.6	968,396	16729.2	889,853	16592.8	880,544
Undesired	Total IX		Unique IX, before		Unique IX, after		
WMFD-TV D12 DT BL	1497.8	52,867	535.5	13,257			
WMFD-TV D12 DT APP	1726.6	65,252			671.8	22,566	
WTOL D11 DT LIC	141.1	9,904	0.0	0	0.0	0	
WBBM-TV D12 DT CP	843.5	29,966	52.5	2,125	32.3	1,140	
WJRT-TV D12 DT LIC	1746.0	54,170	596.9	15,348	572.8	14,875	
WKRC-TV D12 DT LIC	96.0	2,415	0.0	0	0.0	0	
WTVG D13 DT LIC	286.1	15,582	20.2	1,216	12.1	391	

Interference to BLCDDT20130711ABN LIC scenario 2

**IX: 1.05% interference caused

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDDT20130711ABN	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	198.4 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	198.4
	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	120.8
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	239.9
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	206.7
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	261.1
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	118.3
Service area	Terrain-limited		IX-free, before		IX-free, after		Percent New IX
20035.5	1,001,485	19224.6	968,396	16729.1	889,665	16592.8	880,356
Undesired	Total IX		Unique IX, before		Unique IX, after		
WMFD-TV D12 DT BL	1497.8	52,867	527.4	12,347			
WMFD-TV D12 DT APP	1726.6	65,252			663.8	21,656	
WTOL D11 DT LIC	141.1	9,904	0.0	0	0.0	0	
WBBM-TV D12 DT LIC	711.6	28,763	52.5	2,313	32.3	1,328	
WJRT-TV D12 DT LIC	1746.0	54,170	700.9	16,970	672.8	16,470	
WKRC-TV D12 DT LIC	96.0	2,415	0.0	0	0.0	0	
WTVG D13 DT LIC	286.1	15,582	20.2	1,216	12.1	391	

Interference to BLANK0000185925 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	298.9

WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	329.1
WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	254.1
WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	179.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31627.7 2,788,684	30699.1 2,531,200	29960.6 2,387,116	29956.6 2,387,013	0.01 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	176.6 75,023	24.1 12,163	
WMFD-TV D12 DT APP	196.6 78,518		28.1 12,266
WBBM-TV D12 DT CP	136.3 6,133	32.0 1,290	32.0 1,290
WINM D12 DT APP	678.4 130,173	425.6 61,925	413.6 58,702
WICU-TV D12 DT LIC	24.1 11,056	0.0 0	0.0 0
WZZM D13 DT LIC	4.0 458	4.0 458	4.0 458
WTVG D13 DT LIC	4.0 4,886	0.0 0	0.0 0

Interference to BLANK0000185925 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	298.9
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	329.1
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	254.1
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	179.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31627.7 2,788,684	30699.1 2,531,200	29984.6 2,388,328	29980.6 2,388,225	0.01 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	176.6 75,023	24.1 12,163	
WMFD-TV D12 DT APP	196.6 78,518		28.1 12,266
WBBM-TV D12 DT LIC	24.1 762	8.0 78	8.0 78
WINM D12 DT APP	678.4 130,173	501.9 65,588	489.9 62,365
WICU-TV D12 DT LIC	24.1 11,056	0.0 0	0.0 0
WZZM D13 DT LIC	4.0 458	4.0 458	4.0 458
WTVG D13 DT LIC	4.0 4,886	0.0 0	0.0 0

Interference to BLANK0000185925 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	298.9
	WBBM-TV	D12	DT	CP	CHICAGO, IL	BLANK0000207079	329.1
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	206.7
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	179.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31627.7 2,788,684	30699.1 2,531,200	30117.3 2,409,412	30113.3 2,409,309	0.01 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	176.6 75,023	24.1 12,079	
WMFD-TV D12 DT APP	196.6 78,518		28.1 12,182
WBBM-TV D12 DT CP	136.3 6,133	44.0 1,589	44.0 1,589
WINM D12 DT LIC	509.7 107,662	268.9 39,629	256.9 36,406
WICU-TV D12 DT LIC	24.1 11,056	0.0 0	0.0 0
WZZM D13 DT LIC	4.0 458	4.0 458	4.0 458
WTVG D13 DT LIC	4.0 4,886	0.0 0	0.0 0

Interference to BLANK0000185925 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	

Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	298.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	298.9
	WBBM-TV	D12	DT	LIC	CHICAGO, IL	BLANK0000187049	329.1
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	206.7
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	352.6
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	150.3
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	179.9

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
31627.7 2,788,684	30699.1 2,531,200	30149.3 2,410,472	30145.3 2,410,369	0.01 0.00

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	176.6 75,023	24.1 12,079	
WMFD-TV D12 DT APP	196.6 78,518		28.1 12,182
WBBM-TV D12 DT LIC	24.1 762	12.0 529	12.0 529
WINM D12 DT LIC	509.7 107,662	337.2 43,444	325.1 40,221
WICU-TV D12 DT LIC	24.1 11,056	0.0 0	0.0 0
WZZM D13 DT LIC	4.0 458	4.0 458	4.0 458
WTVG D13 DT LIC	4.0 4,886	0.0 0	0.0 0

Interference to BLANK0000157760 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	243.5 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	243.5
	WHAS-TV	D11	DT	LIC	LOUISVILLE, KY	BLANK0000197250	144.0
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	228.5
	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	300.7
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	170.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
29368.6 3,281,914	28367.9 3,219,439	27606.6 3,152,507	27398.9 3,140,415	0.75 0.38

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	272.5 22,708	87.8 3,882	
WMFD-TV D12 DT APP	540.8 45,121		295.5 15,974
WHAS-TV D11 DT LIC	44.2 2,786	20.1 2,083	20.1 2,083
WINM D12 DT APP	481.4 53,877	232.9 30,887	172.3 20,566
WEHT D12 DT LIC	235.9 11,254	148.0 6,387	148.0 6,387

Interference to BLANK0000157760 LIC scenario 2

**IX: 0.69% interference caused

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	243.5 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	243.5
	WHAS-TV	D11	DT	LIC	LOUISVILLE, KY	BLANK0000197250	144.0
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	261.1
	WEHT	D12	DT	LIC	EVANSVILLE, IN	BLANK0000120480	300.7
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	170.0

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
29368.6 3,281,914	28367.9 3,219,439	27747.1 3,180,025	27507.0 3,158,136	0.87 0.69

Undesired	Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	272.5 22,708	159.4 4,462	
WMFD-TV D12 DT APP	540.8 45,121		399.5 26,351
WHAS-TV D11 DT LIC	44.2 2,786	20.1 2,083	20.1 2,083
WINM D12 DT LIC	217.4 21,677	92.4 3,369	64.1 2,845
WEHT D12 DT LIC	235.9 11,254	199.9 10,489	199.9 10,489

Interference to BLANK0000074553 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	255.8 km

WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	255.8
WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	306.8
CHEX-DT	D12	DT	LIC	PETERBOROUGH, ON	BLANKCANADA212	291.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
18948.9	740,115	17983.3	691,450	17685.2	681,218	17669.0	681,062	0.09	0.02
6181.5	54,853	6181.5	54,853	6181.5	54,853	6181.5	54,853	0.00	0.00 (in

Undesired					Total IX	Unique IX, before		Unique IX, after	
WMFD-TV	D12	DT	BL	185.8	5,311	153.4	4,113		
WMFD-TV	D12	DT	APP	201.9	5,467			169.6	4,269
WBOY-TV	D12	DT	LIC	40.4	1,341	8.1	143	8.1	143
CHEX-DT	D12	DT	LIC	104.2	4,778	104.2	4,778	104.2	4,778

Interference to BLANK0000003150 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	254.8 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	254.8
	WPCW	D11	DT	LIC	JEANNETTE, PA	BLCDT20090626AAT	137.0
	WBAL-TV	D12	DT	LIC	BALTIMORE, MD	BLANK0000136441	316.4
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	306.8
	WVFX	D13	DT	LIC	CLARKSBURG, WV	BLANK0000179139	2.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
26747.7	711,302	25314.8	639,639	25214.5	637,362	25234.5	637,558	-0.08	-0.03
Undesired				Total IX	Unique IX, before		Unique IX, after		
WMFD-TV D12 DT BL		68.4	880	60.3	802				
WMFD-TV D12 DT APP		48.3	684			40.3	606		
WPCW D11 DT LIC		12.1	924	4.0	846	4.0	846		
WBAL-TV D12 DT LIC		19.9	299	19.9	299	19.9	299		
WICU-TV D12 DT LIC		12.1	108	4.0	30	4.0	30		
WVFX D13 DT LIC		4.0	222	4.0	222	4.0	222		

Interference to BLANK0000143483 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	121.9
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	161.6
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
25918.0	4,405,350	25721.5	4,387,209	25333.4	4,357,664	25317.5	4,356,985	0.06	0.02
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00	0.00 (in

Undesired	Total IX	Unique IX, before	Unique IX, after	
WMFD-TV D12 DT BL	63.7	518	63.7	518
WMFD-TV D12 DT APP	79.6	1,197	79.6	1,197
WTHR D13 DT LIC	32.3	3,037	20.2	2,882
WZZM D13 DT LIC	304.2	26,145	292.1	25,990

Interference to BLANK0000143483 LIC scenario 2

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	121.9
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	161.6
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
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25918.0	4,405,350	25721.5	4,387,209	25188.4	4,354,517	25172.5	4,353,838	0.06	0.02	
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00	0.00	(in

Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	63.7	518	63.7	518
WMFD-TV D12 DT APP	79.6	1,197		79.6
WTHR D13 DT APP	193.4	7,403	165.3	6,029
WZZM D13 DT LIC	304.2	26,145	276.1	24,771

Interference to BLANK0000143483 LIC scenario 3

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	121.9
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3
	WTHR	D13	DT	LIC	INDIANAPOLIS, IN	BLANK0000153712	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1

	Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
25918.0	4,405,350	25721.5	4,387,209	25333.4	4,357,664	25317.5	4,356,985	0.06
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00

Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	63.7	518	63.7	518
WMFD-TV D12 DT APP	79.6	1,197		79.6
WINM D12 DT LIC	4.0	32	0.0	0
WTHR D13 DT LIC	32.3	3,037	16.2	2,850
WZZM D13 DT LIC	304.2	26,145	292.1	25,990

Interference to BLANK0000143483 LIC scenario 4

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	
Undesireds:	WMFD-TV	D12	DT	BL	MANSFIELD, OH	DTVBL41893	121.9 km
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	121.9
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	118.3
	WTHR	D13	DT	APP	INDIANAPOLIS, IN	BPCDT20130702ABM	303.8
	WZZM	D13	DT	LIC	GRAND RAPIDS, MI	BLCDT20100726AKV	273.1

	Service area		Terrain-limited		IX-free, before		IX-free, after	Percent New IX
25918.0	4,405,350	25721.5	4,387,209	25188.4	4,354,517	25172.5	4,353,838	0.06
4368.4	389,070	4368.4	389,070	4368.4	389,070	4368.4	389,070	0.00

Canada)

Undesired		Total IX	Unique IX, before	Unique IX, after
WMFD-TV D12 DT BL	63.7	518	63.7	518
WMFD-TV D12 DT APP	79.6	1,197		79.6
WINM D12 DT LIC	4.0	32	0.0	0
WTHR D13 DT APP	193.4	7,403	161.3	5,997
WZZM D13 DT LIC	304.2	26,145	276.1	24,771

Interference to proposal scenario 1

**MX: 16.17% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	
Undesireds:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	119.4 km
	WINM	D12	DT	APP	ANGOLA, IN	BLANK0000199518	219.3
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	298.9
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	243.5
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	255.8
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	121.9

	Service area		Terrain-limited		IX-free		Percent IX
23147.0	1,897,506	22153.3	1,586,584	21193.0	1,330,068	4.33	16.17

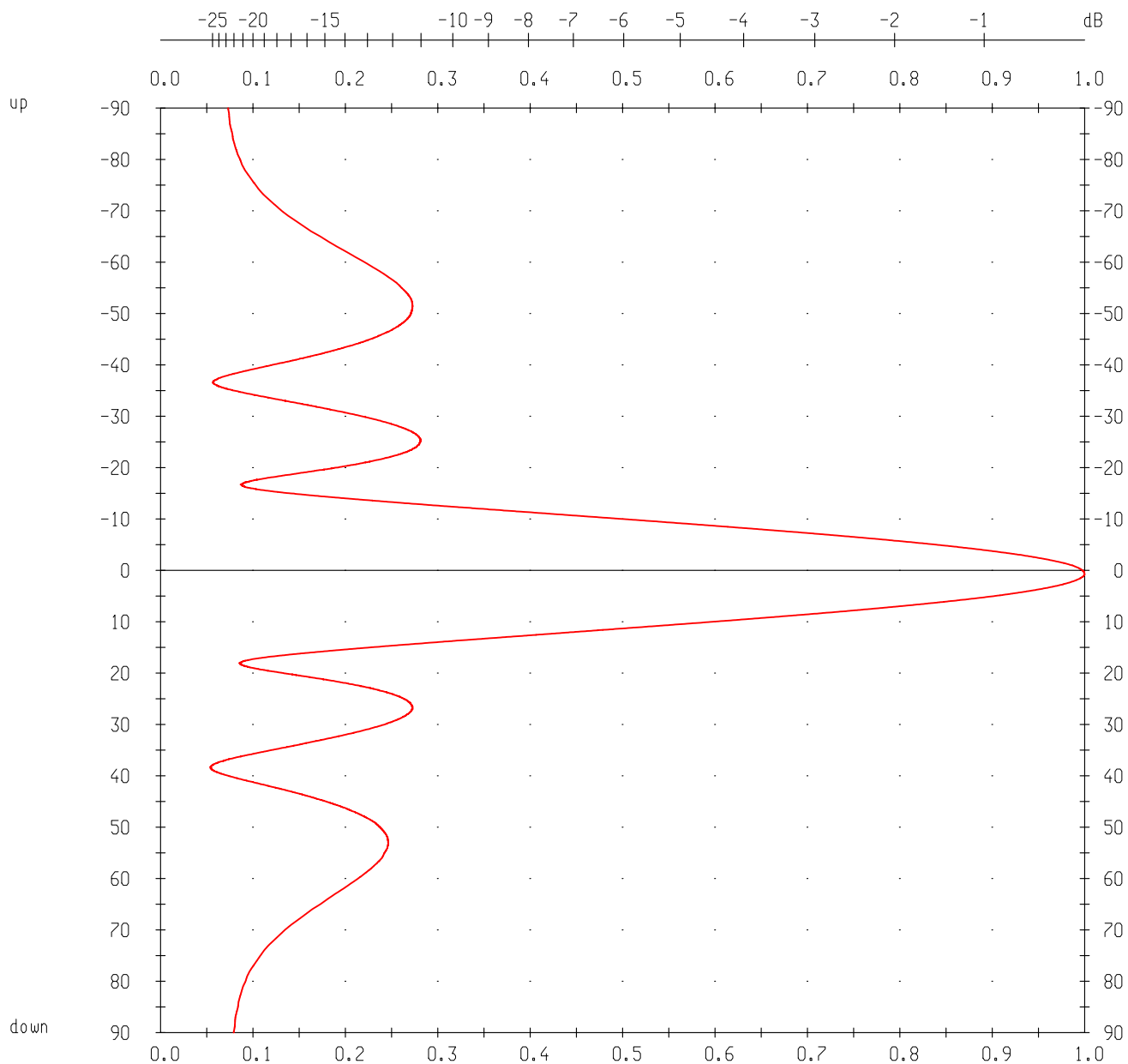
Undesired		Total IX		Unique IX	Prcnt Unique IX	
WTOL D11 DT LIC	339.9	23,228	8.1	72	0.04	0.00
WINM D12 DT APP	358.8	96,047	84.2	10,893	0.38	0.69
WJRT-TV D12 DT LIC	178.0	46,898	12.1	4,653	0.05	0.29
WKRC-TV D12 DT LIC	266.0	152,979	177.3	91,817	0.80	5.79
WICU-TV D12 DT LIC	169.5	58,911	36.3	16,443	0.16	1.04
WBOY-TV D12 DT LIC	112.4	49,922	28.1	1,455	0.13	0.09
WTVG D13 DT LIC	368.3	26,061	24.3	1,986	0.11	0.13

Interference to proposal scenario 2
15.68% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	WMFD-TV	D12	DT	APP	MANSFIELD, OH	WMFD 16.4kW-DA US&Cana	
Undesireds:	WTOL	D11	DT	LIC	TOLEDO, OH	BLANK0000164536	119.4 km
	WINM	D12	DT	LIC	ANGOLA, IN	BLCDT20130711ABN	198.4
	WJRT-TV	D12	DT	LIC	FLINT, MI	BLANK0000185925	298.9
	WKRC-TV	D12	DT	LIC	CINCINNATI, OH	BLANK0000157760	243.5
	WICU-TV	D12	DT	LIC	ERIE, PA	BLANK0000074553	255.8
	WBOY-TV	D12	DT	LIC	CLARKSBURG, WV	BLANK0000003150	254.8
	WTVG	D13	DT	LIC	TOLEDO, OH	BLANK0000143483	121.9

Service area		Terrain-limited		IX-free		Percent IX	
23147.0	1,897,506	22153.3	1,586,584	21233.2	1,337,813	4.15	15.68

Undesired		Total IX		Unique IX	Prcnt Unique IX	
WTOL D11 DT LIC	339.9	23,228	8.1	72	0.04	0.00
WINM D12 DT LIC	205.8	47,849	44.1	3,148	0.20	0.20
WJRT-TV D12 DT LIC	178.0	46,898	12.1	4,653	0.05	0.29
WKRC-TV D12 DT LIC	266.0	152,979	205.5	103,578	0.93	6.53
WICU-TV D12 DT LIC	169.5	58,911	56.5	17,334	0.26	1.09
WBOY-TV D12 DT LIC	112.4	49,922	44.1	2,238	0.20	0.14
WTVG D13 DT LIC	368.3	26,061	28.3	2,186	0.13	0.14



frequency in MHz 207.000
azimut in 300.0
omni-dir in dBd 5.66

KATHREIN Rosenheim Germany		Typ Nr.
		Bl.:
BCA/Mi	6.4.23 13:16	