

***** WSHJ_Licensed_Facility *****
FM CHANNEL INTERFERENCE STUDY

Job title: WSHJ-FM
Proposed latitude: N 42 28 12.03
Proposed longitude: W 83 15 49.53
Proposed transmit antenna elevation(AMSL): 232.0 meters
Proposed maximum ERP: 0.1250 kW
Database file name: C:\Program Files\Database_FM\
Protect maximum contours?: N

Proposed channel: 202A

CH	Call	Record	City	ST	Status	Bear.	Dist.	Reqd. Dist.	Result
202A	WBWC	3164	BEREA	OH	APP	135.6	162.6	90.8	
Prop	F(50, 10)	40 dBu	21.2 km + WBWC	F(50, 50)	60 dBu	27.6 km =		48.8	
Prop	F(50, 50)	60 dBu	6.3 km + WBWC	F(50, 10)	40 dBu	84.5 km =		90.8	
202A	WBWC	3172	BEREA	OH	LIC	135.6	162.6	87.4	
Prop	F(50, 10)	40 dBu	21.2 km + WBWC	F(50, 50)	60 dBu	26.3 km =		47.5	
Prop	F(50, 50)	60 dBu	6.3 km + WBWC	F(50, 10)	40 dBu	81.0 km =		87.4	
203B1	980522MD	3549	SANDUSKY	OH	APP	162.6	124.1	40.0	
Prop	F(50, 10)	54 dBu	10.0 km + 980522	F(50, 50)	60 dBu	22.2 km =		32.3	
Prop	F(50, 50)	60 dBu	7.0 km + 980522	F(50, 10)	54 dBu	33.0 km =		40.0	
203B1	981005MC	3550	SANDUSKY	OH	APP	162.6	124.1	40.4	
Prop	F(50, 10)	54 dBu	10.0 km + 981005	F(50, 50)	60 dBu	22.4 km =		32.5	
Prop	F(50, 50)	60 dBu	7.0 km + 981005	F(50, 10)	54 dBu	33.4 km =		40.4	
256B1	WFRO-FM	3555	FREMONT	OH	CP	166.8	109.8	11.0	
IF channel separation requirement = 11.0 km									
202A	WNFA	3558	PORT HURON	MI	LIC	47.9	87.3	60.5	
Prop	F(50, 10)	40 dBu	19.9 km + WNFA	F(50, 50)	60 dBu	15.2 km =		35.1	
Prop	F(50, 50)	60 dBu	6.0 km + WNFA	F(50, 10)	40 dBu	54.5 km =		60.5	
204C1	CIMX	3562	WINDSOR	ON	LIC	146.0	40.1	64.4	- 24.3
Prop	F(50, 10)	80 dBu	2.2 km + CIMX	F(50, 50)	60 dBu	62.2 km =		64.4	
Prop	F(50, 50)	60 dBu	6.7 km + CIMX	F(50, 10)	80 dBu	26.5 km =		33.2	
201A	CBEEFM	3563	CHATHAM	ON	LIC	90.9	97.1	21.9	
Prop	F(50, 10)	54 dBu	8.9 km + CBEEFM	F(50, 50)	60 dBu	11.2 km =		20.1	
Prop	F(50, 50)	60 dBu	6.2 km + CBEEFM	F(50, 10)	54 dBu	15.7 km =		21.9	
203A		3568	MOUNT CLEMENS	MI	APP	74.3	30.8	18.9	
Prop	F(50, 10)	54 dBu	8.8 km +	F(50, 50)	60 dBu	9.1 km =		17.8	
Prop	F(50, 50)	60 dBu	6.1 km +	F(50, 10)	54 dBu	12.7 km =		18.9	
202A	WXTS-FM	3846	TOLEDO	OH	LIC	195.2	92.2	31.9	
Prop	F(50, 10)	40 dBu	24.8 km + WXTS-F	F(50, 50)	60 dBu	7.1 km =		31.9	
Prop	F(50, 50)	60 dBu	7.4 km + WXTS-F	F(50, 10)	40 dBu	23.8 km =		31.2	
202A	WXUT	3856	TOLEDO	OH	LIC	197.9	94.9	34.8	
Prop	F(50, 10)	40 dBu	24.5 km + WXUT	F(50, 50)	60 dBu	8.3 km =		32.8	
Prop	F(50, 50)	60 dBu	7.3 km + WXUT	F(50, 10)	40 dBu	27.5 km =		34.8	
201A	WJOF	3876	MONROE	MI	LIC	188.6	61.9	23.0	
Prop	F(50, 10)	54 dBu	10.8 km + WJOF	F(50, 50)	60 dBu	11.0 km =		21.8	
Prop	F(50, 50)	60 dBu	7.5 km + WJOF	F(50, 10)	54 dBu	15.4 km =		23.0	

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201A	WJOF	3877	MONROE	MI CP	188.6	61.9	23.7	
Prop	F(50, 10)	54 dBu	10.8 km + WJOF	F(50, 50) 60 dBu	11.3	km =	22.1	
Prop	F(50, 50)	60 dBu	7.5 km + WJOF	F(50, 10) 54 dBu	16.2	km =	23.7	
201A	WSDP	3881	PLYMOUTH	MI LIC	234.6	23.6	18.1	5.4
Prop	F(50, 10)	54 dBu	9.0 km + WSDP	F(50, 50) 60 dBu	8.4	km =	17.4	
Prop	F(50, 50)	60 dBu	6.3 km + WSDP	F(50, 10) 54 dBu	11.8	km =	18.1	
202A	WCBN-FM	3890	ANN ARBOR	MI LIC	241.2	44.4	38.6	5.7
Prop	F(50, 10)	40 dBu	19.9 km + WCBN-F	F(50, 50) 60 dBu	9.8	km =	29.7	
Prop	F(50, 50)	60 dBu	6.0 km + WCBN-F	F(50, 10) 40 dBu	32.6	km =	38.6	
202A	WSHJ	3895	SOUTHFIELD	MI LIC	265.4	0.0	26.5	-26.5
Prop	F(50, 10)	40 dBu	19.9 km + WSHJ	F(50, 50) 60 dBu	6.2	km =	26.1	
Prop	F(50, 50)	60 dBu	6.0 km + WSHJ	F(50, 10) 40 dBu	20.5	km =	26.5	
201A	WBFH	3898	BLOOMFIELD HILLS	MI LIC	351.4	12.2	14.7	-2.6
Prop	F(50, 10)	54 dBu	8.6 km + WBFH	F(50, 50) 60 dBu	6.2	km =	14.7	
Prop	F(50, 50)	60 dBu	6.0 km + WBFH	F(50, 10) 54 dBu	8.7	km =	14.7	
202A	WXOU	3903	AUBURN HILLS	MI LIC	5.8	26.8	24.0	2.8
Prop	F(50, 10)	40 dBu	19.9 km + WXOU	F(50, 50) 60 dBu	4.1	km =	24.0	
Prop	F(50, 50)	60 dBu	6.0 km + WXOU	F(50, 10) 40 dBu	12.8	km =	18.8	
205A	WGRI	3907	FLINT	MI LIC	330.4	60.3	8.1	
Prop	F(50, 10)	100 dBu	0.0 km + WGRI	F(50, 50) 60 dBu	8.1	km =	8.1	
Prop	F(50, 50)	60 dBu	6.0 km + WGRI	F(50, 10) 100 dBu	0.0	km =	6.0	
201D	WHPR-FM	3924	HIGHLAND PARK	MI CP	116.0	14.8	11.8	3.0
Prop	F(50, 10)	54 dBu	8.7 km + WHPR-F	F(50, 50) 60 dBu	3.1	km =	11.8	
Prop	F(50, 50)	60 dBu	6.1 km + WHPR-F	F(50, 10) 54 dBu	4.4	km =	10.5	
205A	WAKL	3928	FLINT	MI CP	335.8	62.2	11.0	
Prop	F(50, 10)	100 dBu	0.0 km + WAKL	F(50, 50) 60 dBu	11.0	km =	11.0	
Prop	F(50, 50)	60 dBu	6.0 km + WAKL	F(50, 10) 100 dBu	0.0	km =	6.0	
255A	WOWE	3939	VASSAR	MI LIC	347.8	94.2	10.0	
IF channel separation requirement = 10.0 km								
203A	980505MD	3948	GAGETOWN	MI APP	5.3	143.8	48.7	
Prop	F(50, 10)	54 dBu	8.6 km + 980505	F(50, 50) 60 dBu	27.6	km =	36.2	
Prop	F(50, 50)	60 dBu	6.0 km + 980505	F(50, 10) 54 dBu	42.7	km =	48.7	
203C3	981231MF	3949	CASS CITY	MI APP	7.4	129.5	56.1	
Prop	F(50, 10)	54 dBu	8.6 km + 981231	F(50, 50) 60 dBu	30.6	km =	39.1	
Prop	F(50, 50)	60 dBu	6.0 km + 981231	F(50, 10) 54 dBu	50.1	km =	56.1	
203C3	990104MD	3950	ELKTON	MI APP	5.3	143.8	59.2	
Prop	F(50, 10)	54 dBu	8.6 km + 990104	F(50, 50) 60 dBu	34.2	km =	42.7	
Prop	F(50, 50)	60 dBu	6.0 km + 990104	F(50, 10) 54 dBu	53.2	km =	59.2	
204A		3951	TAYMOUTH TOWNSHIP	MI APP	334.3	97.2	9.3	
Prop	F(50, 10)	80 dBu	2.0 km +	F(50, 50) 60 dBu	7.4	km =	9.3	
Prop	F(50, 50)	60 dBu	6.0 km +	F(50, 10) 80 dBu	2.4	km =	8.4	
201A	WVKM	3960	GOODLAND TOWNSHIP	MI LIC	11.5	79.9	34.3	
Prop	F(50, 10)	54 dBu	8.6 km + WVKM	F(50, 50) 60 dBu	19.1	km =	27.7	
Prop	F(50, 50)	60 dBu	6.0 km + WVKM	F(50, 10) 54 dBu	28.3	km =	34.3	
203B1	WYSA	4300	WAUSEON	OH LIC	217.2	126.8	27.0	
Prop	F(50, 10)	54 dBu	9.5 km + WYSA	F(50, 50) 60 dBu	13.6	km =	23.1	
Prop	F(50, 50)	60 dBu	6.7 km + WYSA	F(50, 10) 54 dBu	20.3	km =	27.0	

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256B	WFMK	4314	EAST LANSING	MI LIC	283.2	104.0	14.0
IF channel separation requirement = 14.0 km							
205A	WDBM	4315	EAST LANSING	MI LIC	285.2	102.8	19.8
Prop F(50, 10)	100 dBu	0.0 km + WDBM	F(50, 50)	60 dBu	19.8 km =	19.8	
Prop F(50, 50)	60 dBu	6.0 km + WDBM	F(50, 10)	100 dBu	1.9 km =	7.9	
201A	WLGH	4323	LEROY TOWNSHIP	MI LIC	286.7	93.5	40.7
Prop F(50, 10)	54 dBu	8.6 km + WLGH	F(50, 50)	60 dBu	23.1 km =	31.7	
Prop F(50, 50)	60 dBu	6.0 km + WLGH	F(50, 10)	54 dBu	34.7 km =	40.7	
201B	WLGH	4324	LEROY TOWNSHIP	MI CP	286.7	93.5	46.4
Prop F(50, 10)	54 dBu	8.6 km + WLGH	F(50, 50)	60 dBu	26.8 km =	35.4	
Prop F(50, 50)	60 dBu	6.0 km + WLGH	F(50, 10)	54 dBu	40.4 km =	46.4	
202A	WAAQ	4334	ONSTED	MI LIC	238.1	86.9	30.0
Prop F(50, 10)	40 dBu	20.2 km + WAAQ	F(50, 50)	60 dBu	7.1 km =	27.4	
Prop F(50, 50)	60 dBu	6.1 km + WAAQ	F(50, 10)	40 dBu	23.9 km =	30.0	
203A	990607ME	4336	JACKSON	MI LIC	256.7	92.7	14.2
Prop F(50, 10)	54 dBu	8.6 km + 990607	F(50, 50)	60 dBu	5.7 km =	14.2	
Prop F(50, 50)	60 dBu	6.0 km + 990607	F(50, 10)	54 dBu	8.0 km =	14.1	
203B1	WJOM	4339	EAGLE	MI APP	287.4	130.3	50.9
Prop F(50, 10)	54 dBu	8.6 km + WJOM	F(50, 50)	60 dBu	28.6 km =	37.2	
Prop F(50, 50)	60 dBu	6.0 km + WJOM	F(50, 10)	54 dBu	44.9 km =	50.9	
202A	WAAQ	4340	ONSTED	MI CP	240.1	90.8	29.9
Prop F(50, 10)	40 dBu	19.9 km + WAAQ	F(50, 50)	60 dBu	7.1 km =	27.1	
Prop F(50, 50)	60 dBu	6.0 km + WAAQ	F(50, 10)	40 dBu	23.9 km =	29.9	
202C2	WEJC	4365	WHITE STAR	MI LIC	328.2	195.1	135.7
Prop F(50, 10)	40 dBu	19.9 km + WEJC	F(50, 50)	60 dBu	50.6 km =	70.5	
Prop F(50, 50)	60 dBu	6.0 km + WEJC	F(50, 10)	40 dBu	129.7 km =	135.7	
202C1	WEJC	4366	WHITE STAR	MI CP	328.2	195.1	158.8
Prop F(50, 10)	40 dBu	19.9 km + WEJC	F(50, 50)	60 dBu	59.4 km =	79.3	
Prop F(50, 50)	60 dBu	6.0 km + WEJC	F(50, 10)	40 dBu	152.8 km =	158.8	
6 TV	WLNSTV		LANSING	MI LIC	285.2	94.5	113.6
Prop F(50, 10)	51 dBu	10.4 km + WLNSTV	F(50, 50)	47 dBu	103.2 km =	113.6	- 19.1

***** End of channel 202 study *****