Educational Media Foundation
5700 West Oaks Boulevard
Rocklin, CA 95765

Channel Study

REFERENCE — CH# 206C2- 89.1 MHz, Pwr= 50 kW DA, HAAT= 110.0 M, COR= 296 M — DISPLAY DATES
43 33 42.0 N. — Average Protected F(50-50)= 46.4 km — DATA 10-19-16
83 58 52.0 W. — Standard Directional — SEARCH 11-02-16

CH CALL	TYPE	ANT	AZI.	DIST	LAT.	Pwr(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY	STATE		<--	FILE #	LNG.	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
206C2 WLKB!	LIC	DVX	0.0	0.00	43 33 42.0	50.000	132.8	47.1	-180.0	-180.0
Bay City	MI		0.0	BLED20061222AAS	83 58 52.0	113	296	Educational Media Foundati		
206B WLKB!	VAC	N	61.1	13.59	43 37 14.0	50.000	137.5	52.0	-170.4	-169.4
Bay City	MI		241.2		83 50 01.0	150	330			
205A WAKL	LIC	DVX	153.1	72.41	42 58 49.0	0.380	21.3	14.2	13.4	0.9
Flint	MI		333.3	BLED20041102AEF	83 34 40.0	80	330	Educational Media Foundati		
208C1 WCMU-FM	LIC	CX	271.7	64.13	43 34 33.0	100.000	7.0	58.0	12.8	1.3
Mount Pleasant	MI		91.1	BLED20140121MLX	84 46 29.0	130	371	Central Michigan Universit		
207C3 WSMB	LIC	DEX	79.8	80.82	43 41 10.0	12.000	28.0	18.9	13.7	2.4
Harbor Beach	MI		260.5	BLED20121026ACG	82 59 40.0	145	384	Smile Fm		
206A WOCR	LIC	CX	212.0	146.27	42 26 31.0	0.500	28.6	8.5	72.2	6.5
Olivet	MI		31.3	BLED20100908ACJ	84 55 30.0	25	303	Board Of Trustees/olivet C		
206B1 WEMU	LIC	DCN	168.6	147.11	42 15 48.0	15.500	81.1	22.1	24.1	6.8
Ypsilanti	MI		348.8	BLED19920109KA	83 37 34.0	88	331	Eastern Michigan Universit		
205A WDBM	LIC	CN	203.0	103.25	42 42 20.0	2.000	30.4	20.6	27.0	11.7
East Lansing	MI		22.7	BLED19890123KJ	84 28 30.0	85	349	Bd Of Trustee Of Michigan		
259C0 WUGN«	LIC	CX	263.8	45.92	43 30 57.0	100.000	39.5	26.0	31.0R	14.9M
Midland	MI		83.4	BLED20130702ABR	84 32 45.0	304	519	Family Life Broadcasting S		
259C0 R14902«	RSV-R		263.8	46.02	43 30 56.0	100.000	39.5	26.0	31.0R	15.0M
Midland	MI		83.4		84 32 49.0	450	662			
205A WDTR	LIC	DCX	138.4	102.62	42 52 09.0	3.200	28.4	19.4	36.0	25.1
Imlay City	MI		318.9	BLED20160802AEI	83 08 43.0	61	352	Michigan Community Radio		
206A WPHS	APP	DCX	145.5	140.49	42 31 00.0	0.600	25.8	7.7	77.1	27.3
Warren	MI		326.1	BPED20160204AHA	83 00 36.0	30	225	Warren Consolidated School		
206A WPHS	LIC	CN	145.5	140.49	42 31 00.0	0.100	18.7	5.7	84.2	29.3
Warren	MI		326.1	BMLED19880126KB	83 00 36.0	30	225	Warren Consolidated School		
203A WCTP	LIC	CX	72.5	74.73	43 45 36.0	6.000	2.9	30.3	29.8	40.0
Gagetown	MI		253.1	BLED20060616ABV	83 05 45.0	100	321	Plonta Broadcasting Inc.		
207B CKGW-FM«	OP	HN	128.7	197.39	42 26 14.0	18.700	63.4	54.6	164.0R	33.4M
Chatham	ON		310.0	8501	82 06 22.0	133	320	Ckgw-fm		
205C3 WGZR	CP	CX	13.5	148.12	44 51 25.0	1.500	47.7	31.6	53.2	44.1
Alpena	MI		193.8	BPED20160426ABD	83 32 34.1	246	481	Baraga Broadcasting, Inc.		
209B1 WTAC	LIC	DVX	166.5	92.82	42 44 56.0	15.000	4.1	40.1	47.4	48.4
Burton	MI		346.7	BLED20130809AAP	83 42 59.0	110	401	Smile Fm		
206B CBLA-FM-2«	AX	DHN	95.5	288.38	43 15 39.0	5.810	100.7	39.3	237.0R	51.4M
Paris	ON		277.9	6052	80 26 38.0	249	539	Cbla-fm-2ax1		
206B CBLA-FM-2«	OP	DHN	95.5	288.38	43 15 39.0	10.400	109.9	44.0	237.0R	51.4M
Paris	ON		277.9	6052	80 26 38.0	249	539	Cbla-fm-2		
207C1 WTLI	LIC	V	341.4	188.96	45 10 12.0	50.000	89.2	60.6	53.2	56.6
Bear Creek Township	MI		160.8	BLED20150420ABI	84 45 04.0	312	640	Smile Fm		
209A WLNZ	LIC	DCX	207.1	102.71	42 44 15.0	1.000	1.6	9.5	55.4	88.2
Lansing	MI		26.7	BLED20131127BHJ	84 33 12.0	33	293	Lansing Community College		
206A WIDR	LIC	CN	223.7	195.12	42 16 55.0	0.100	27.7	8.4	122.2	55.8
Kalamazoo	MI		42.6	BLED19881031KA	85 37 05.0	57	319	Western Michigan Universit		
203B1 WJOM	CP	DVX	218.2	106.47	42 48 25.0	25.000	2.9	27.9	58.2	73.6
Eagle	MI		37.7	BPED20151005ABC	84 47 18.0	40	287	Michigan Community Radio		

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CH CALL TYPE ANT AZI. DIST LAT. Pwr(kW) INT(km) PRO(km) *IN* *OUT* CITY STATE <-- FILE # LNG. HAAT(M) COR(M) LICENSEE (Overlap in km)
206AA CBC004-FM« AL HN 51.2 268.23 45 02 30.0 6.000 102.5 38.0 210.0R 58.2M Bruce Peninsula ON 233.0 0 81 19 29.0 100 404 Cbc004-fm
207D WBLD! LIC DCX 155.2 121.21 42 34 11.0 0.044 6.5 4.5 76.5 58.6 Orchard Lake MI 335.7 BLED20151116ADO 83 21 40.0 43 313 West Bloomfield School Dis
203A WJOM LIC VX 218.2 106.47 42 48 25.0 4.300 1.9 18.5 59.2 83.0 Eagle MI 37.7 BLED20060427AFG 84 47 18.0 40 287 Michigan Community Radio
204C1 CIMX-FM-A« AX DHN 152.1 174.35 42 10 15.0 76.900 7.3 73.3 115.0R 59.4M Windsor ON 332.8 3953 82 59 29.0 189 373 Cimx-fm-ax1
204C1 CIMX-FM« OP DHN 152.1 174.35 42 10 15.0 100.000 7.9 75.9 115.0R 59.4M Windsor ON 332.8 3953 82 59 29.0 189 373 Cimx-fm
205A WBLU-FM LIC CN 244.9 147.82 42 59 15.0 0.650 24.7 16.6 78.4 61.5 Grand Rapids MI 63.8 BLED19930712KB 85 37 26.0 122 341 Blue Lake Fine Arts Camp
209A WKKM LIC CX 112.6 103.54 43 11 56.0 0.100 0.7 5.9 65.5 93.9 Speaker Township MI 293.4 BLED20130809AAQ 82 48 15.0 32 268 Smile Fm

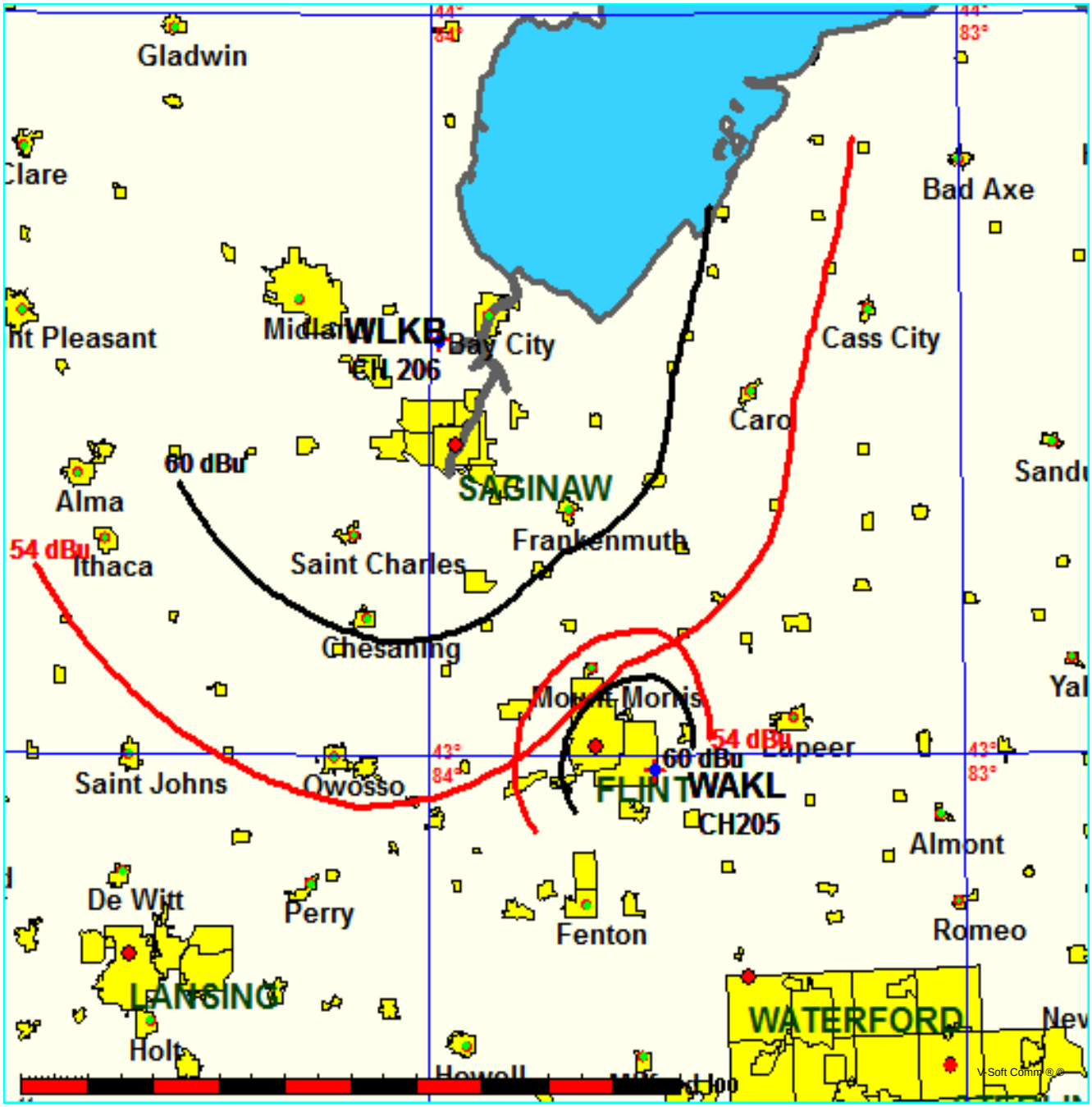
Terrain database is GLOBE 30 Sec, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference Zone= - Zone 2, Co to 3rd adjacent.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
« = Station meets FCC minimum distance spacing for its class.
< = Contour Overlap
Reference station has protected zone issue: Canada

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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 13.37 km, Out= 0.9 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 54 dBu

WAKL CH 205 A DA BLED20041102AEF
Lat= 42 58 49.0, Lng= 83 34 40.0
0.38 kW 80.2 m HAAT, 330 m COR
Prot.= 60 dBu, Intef.= 54 dBu

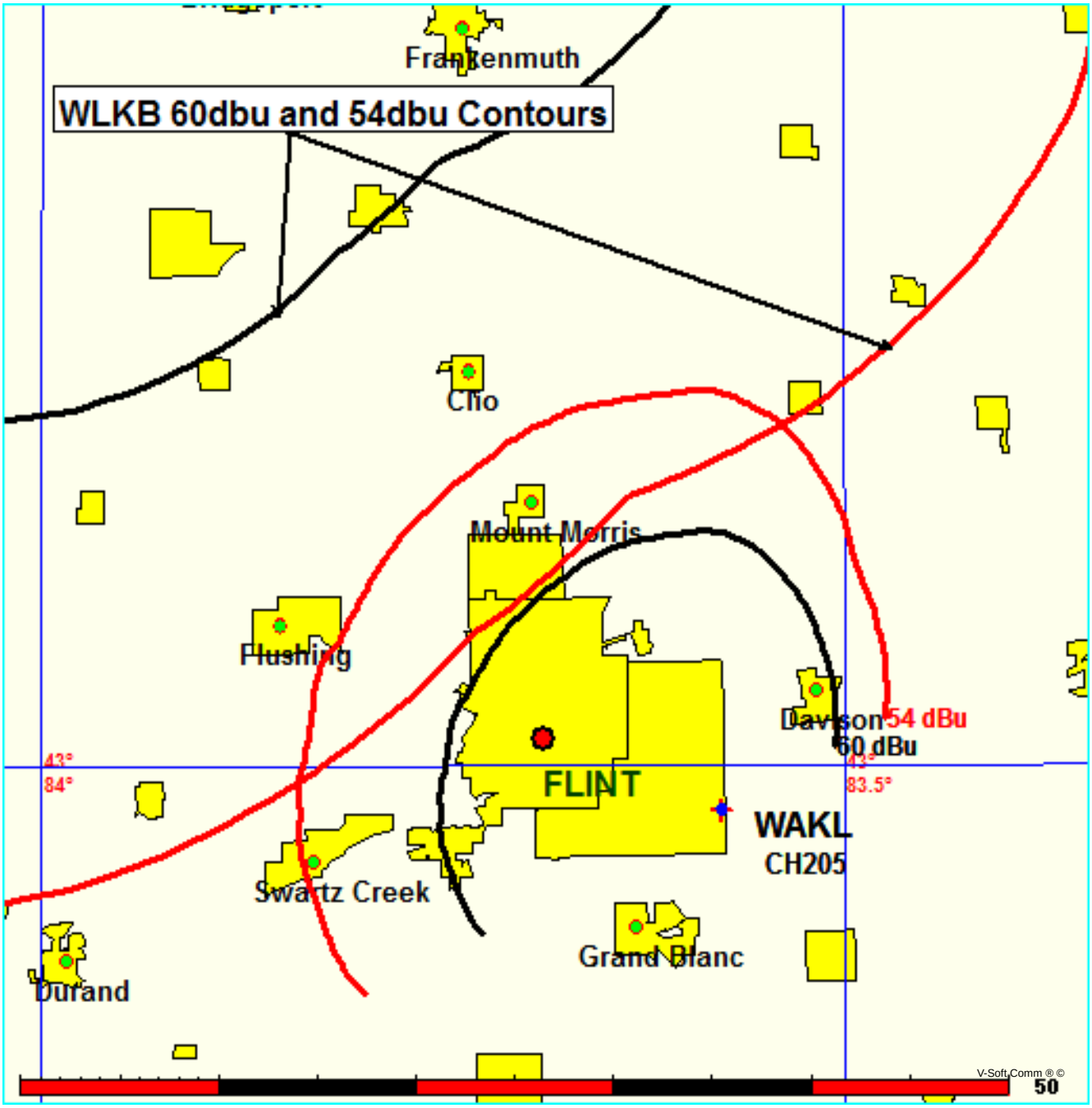


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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 13.37 km, Out= 0.9 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 54 dBu

WAKL CH 205 A DA BLED20041102AEF
Lat= 42 58 49.0, Lng= 83 34 40.0
0.38 kW 80.2 m HAAT, 330 m COR
Prot.= 60 dBu, Intef.= 54 dBu

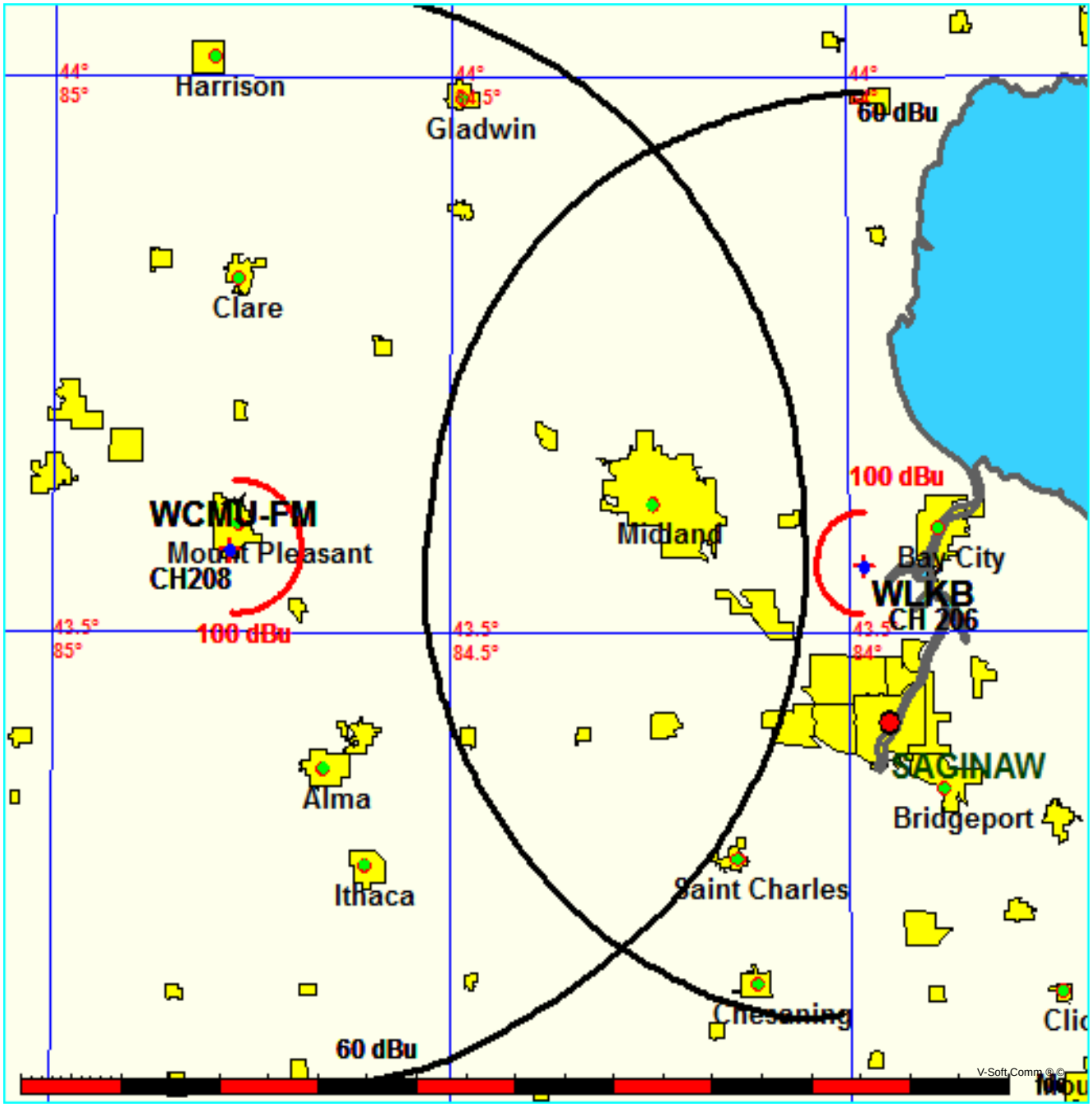


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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 12.76 km, Out= 1.28 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 100 dBu

WCMU-FM CH 208 C1 BLED20140121MLX
Lat= 43 34 33.0, Lng= 84 46 29.0
100.0 kW 130 m HAAT, 371 m COR
Prot.= 60 dBu, Intef.= 100 dBu

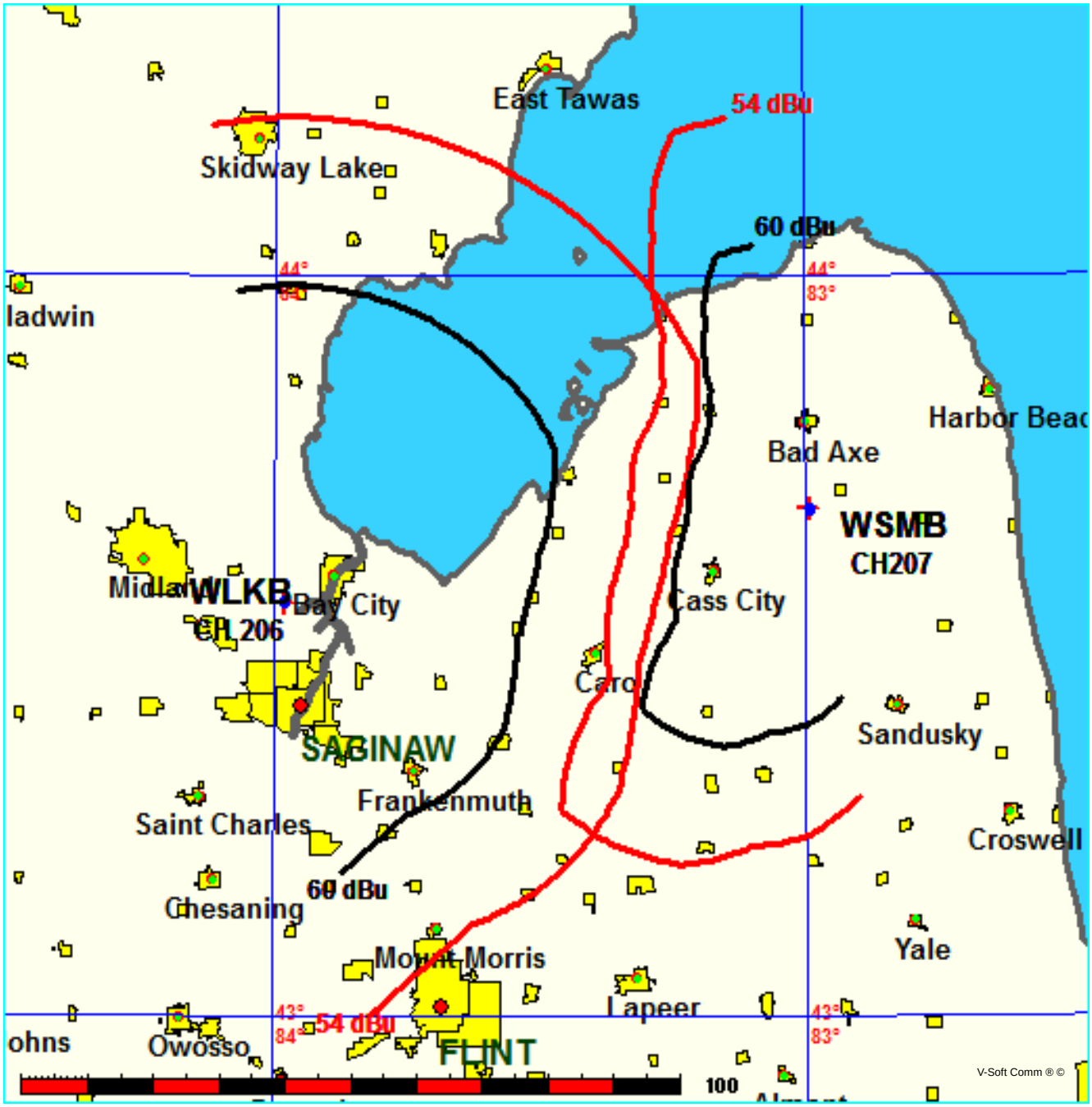


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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 13.68 km, Out= 2.37 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 54 dBu

WSMB CH 207 C3 DA BLED20121026ACG
Lat= 43 41 10.0, Lng= 82 59 40.0
12.0 kW 145 m HAAT, 384 m COR
Prot.= 60 dBu, Intef.= 54 dBu

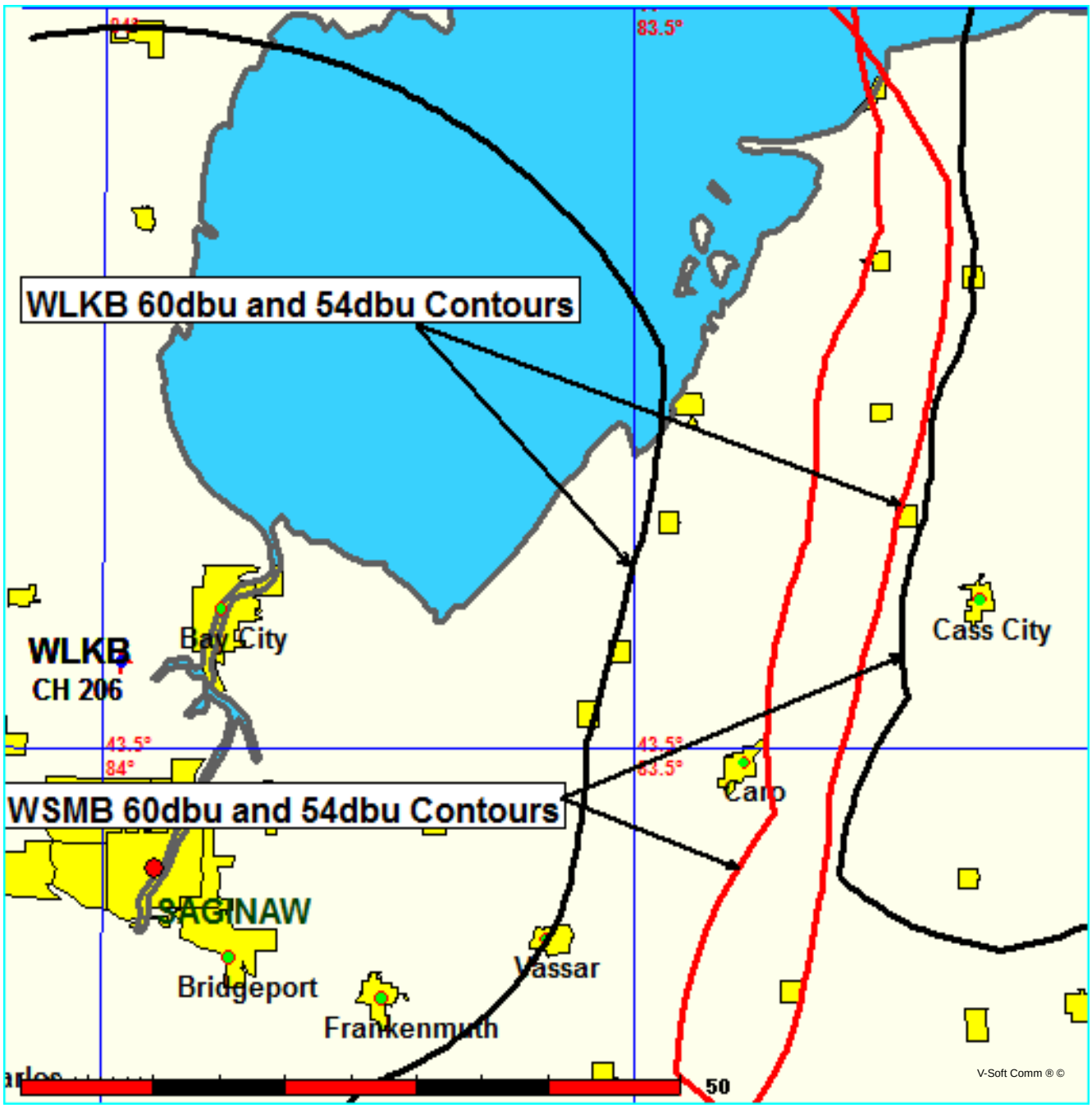


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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 13.68 km, Out= 2.37 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 54 dBu

WSMB CH 207 C3 DA BLED20121026ACG
Lat= 43 41 10.0, Lng= 82 59 40.0
12.0 kW 145 m HAAT, 384 m COR
Prot.= 60 dBu, Intef.= 54 dBu

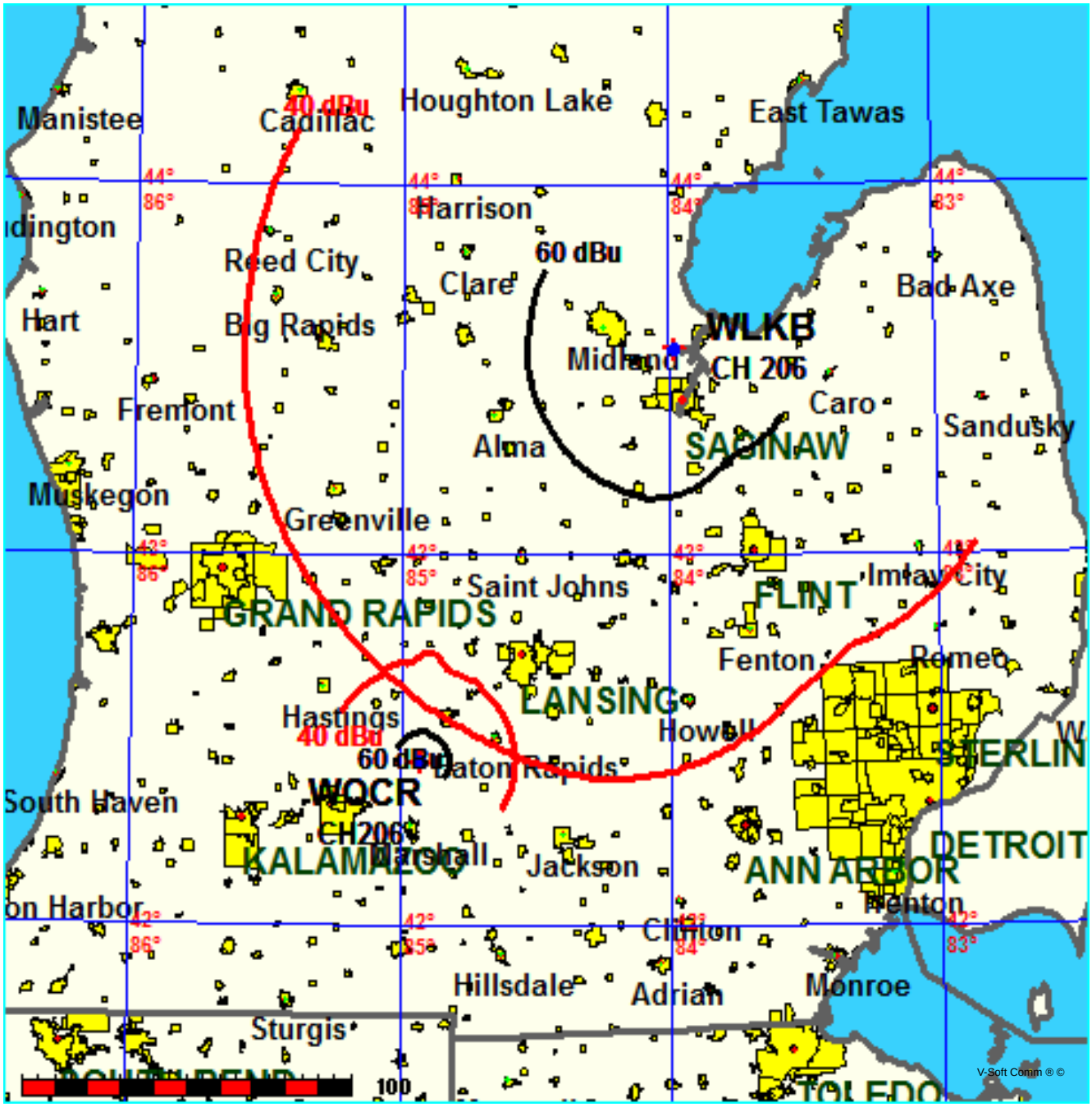


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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 72.2 km, Out= 6.46 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 40 dBu

WOCR CH 206 A BLED20100908ACJ
Lat= 42 26 31.0, Lng= 84 55 30.0
0.5 kW 25 m HAAT, 303 m COR
Prot.= 60 dBu, Intef.= 40 dBu



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FMCommander Single Allocation Study - 11-22-2016 - GLOBE 30 Sec
WLKB's Overlaps (In= 24.11 km, Out= 6.83 km)

WLKB CH 206 C2 DA
Lat= 43 33 42.0, Lng= 83 58 52.0
50.0 kW 110 m HAAT, 296 m COR
Prot.= 60 dBu, Intef.= 40 dBu

WEMU CH 206 B1 DA BLED19920109KA
Lat= 42 15 48.0, Lng= 83 37 34.0
15.5 kW 88 m HAAT, 331 m COR
Prot.= 60 dBu, Intef.= 40 dBu

