

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 18

Troy, OH

## Channel Study

REFERENCE CH# 245A - 96.9 MHz, Pwr= 6 kW DA, HAAT= 95.0 M, COR= 373 M DISPLAY DATES  
39 56 49.0 N. Average Protected F(50-50)= 27.6 km DATA 07-15-10  
84 11 29.0 W. 73.215 Directional SEARCH 07-16-10

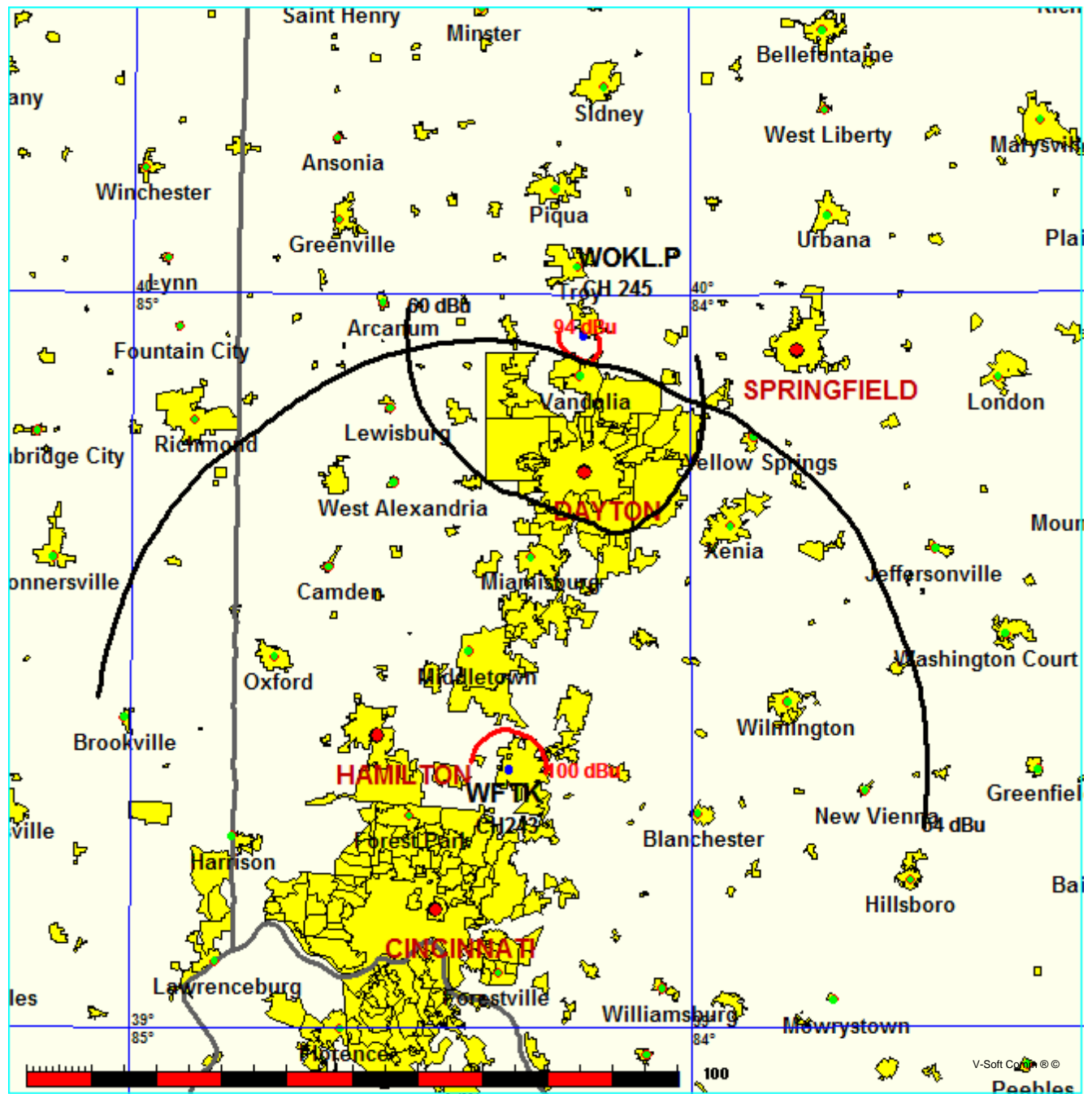
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
245A Troy	WOKL	CP	ZCX OH	0.0 0.0	0.0 BPED20070223AHC	39 56 49.0 84 11 29.0	6.000 95	10.2 373	47.6 Educational Media Foundati	92.0R -92.0M	
245A Troy	WOKL	LIC	ZC OH	0.2 180.2	9.0 BMLH20030619AAC	40 01 41.0 84 11 28.0	3.000 96	10.2 380	47.6 Educational Media Foundati	92.0R -83.0M	
243B Lebanon	WFTK^	LIC	C OH	189.9 9.8	66.9 BMLH20020320ABO	39 21 11.0 84 19 30.0	50.000 150	5.7 377	62.9 Susquehanna Radio Corp.	34.3 0.2	
244A Celina	WCSM-FM«	LIC	CN OH	338.0 157.8	72.6 BLH19850830KZ	40 33 08.0 84 30 46.0	3.000 100	10.2 363	47.6 Hayco Broadcasting, Inc.	72.0R 0.56M	
244A Celina	WCSM-FM«	APP	CX OH	337.8 157.6	72.8 BPH20080918AAC	40 33 10.0 84 31 02.0	3.000 100	10.2 366	47.6 Hayco Broadcasting, Inc.	72.0R 0.8M	
246B Columbus	WBNS-FM^	LIC	CN OH	88.1 268.8	99.5 BLH19850125LM	39 58 16.0 83 01 40.0	50.000 150	75.2 396	62.4 Radiohio, Incorporated	7.3 1.1	
299B Dayton	WMMX«	LIC	CX OH	183.6 3.6	25.0 BLH20020823AAW	39 43 19.0 84 12 36.0	28.000 200	10.2 467	47.6 Citicasters Licenses, Inc.	15.0R 10.0M	
248A Union City	WTGR«	LIC	ZCN OH	298.0 117.6	58.6 BLH19941118KA	40 11 32.0 84 47 58.0	6.000 99	10.2 426	47.6 Positive Radio Group, Inc.	31.0R 27.6M	
242B Columbus	WLVQ«	LIC	CN OH	88.1 268.8	99.5 BLH19830404AN	39 58 16.0 83 01 40.0	18.000 229	10.2 475	47.6 Wilks License Company-colu	69.0R 30.5M	
245C2 Paris	WGKS«	LIC	CN KY	184.0 3.9	202.7 BLH19910606KI	38 07 32.0 84 21 12.0	50.000 150	10.2 433	47.6 L.m. Communications, Inc.	166.0R 36.7M	
246B Shelbyville	WLHK«	LIC	CX IN	259.4 78.2	160.4 BMLH20070501AGZ	39 40 06.0 86 01 44.0	23.000 223	10.2 463	47.6 Emmis Radio License, Llc	113.0R 47.4M	
247A Fort Thomas	WYGY«	LIC	CX KY	199.0 18.8	87.7 BLH20051115ADD	39 12 01.0 84 31 22.0	2.550 155	10.2 373	47.6 Bonneville Holding Company	31.0R 56.7M	
244A Alexandria	WMQX«	LIC	C IN	282.0 101.0	129.0 BLH19980921KB	40 10 38.0 85 40 23.0	2.500 107	10.2 371	47.6 Backyard Broadcasting Indi	72.0R 57.0M	
245A Willard	WLRD«	LIC	CX OH	49.2 230.2	174.3 BMLH20030711AAD	40 57 36.0 82 37 16.0	6.000 100	10.2 422	47.6 Christian Faith Broadcast,	115.0R 59.4M	
248A Greenfield	WVNU«	LIC	CN OH	129.7 310.2	93.5 BLH19980729KE	39 24 28.0 83 21 15.0	2.300 164	10.2 450	47.6 Southern Ohio Broadcasting	31.0R 62.5M	
247C3 Fort Thomas	WYGY«	CP	CX KY	195.1 14.9	106.1 BPH20070615ABV	39 01 27.8 84 30 44.2	25.000 100	10.2 322	47.6 Bonneville Holding Company	42.0R 64.1M	

Terrain database is NGDC 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 = 1, 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)  
""affixed to 'IN' or 'OUT' values = site inside protected contour.  
« = Station meets FCC minimum distance spacing for its class.  
^ = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements

FMCommander Single Allocation Study - 07-16-2010 - NGDC 30 SEC  
 WOKL.P's Overlaps (In= 34.32 km, Out= 0.18 km)

WOKL.P CH 245 A 73.215 Z  
 Lat= 39 56 49.0, Lng= 84 11 29.0  
 6.0 kW 95 M HAAT, 373 M COR  
 Prot.= 60 dBu, Intef.= 94 dBu

WFTK^ CH 243 B BMLH20020320ABO  
 Lat= 39 21 11.0, Lng= 84 19 30.0  
 Max CIs: 50.0 kW 150 M HAAT, 377 M COR  
 Prot.= 54 dBu, Intef.= 100 dBu



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Exhibit 18-A

Troy, OH

## WOKL.P vs. WFTK

07-16-2010 NGDC 30 SEC Terrain Data

WFTK BMLH20020320ABO  
Channel = 243B  
Max ERP = 50 kW  
RCAMSL = 377 M  
N. Lat. 39 21 11.0  
W. Lng. 84 19 30.0  
Protected  
54 dBu

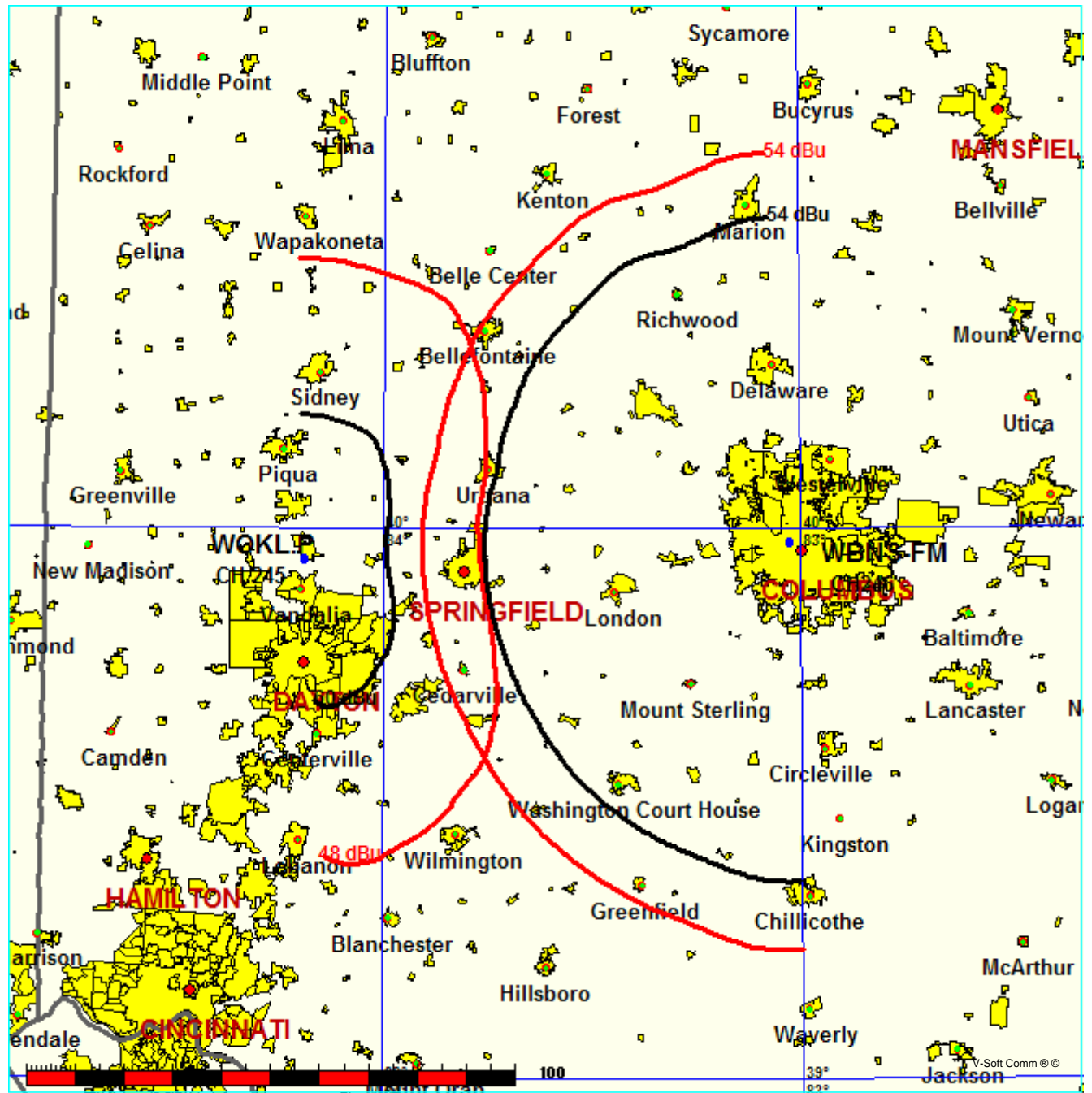
WOKL.P  
Channel = 245A  
Max ERP = 6 kW  
RCAMSL = 373 M  
N. Lat. 39 56 49.0  
W. Lng. 84 11 29.0  
Interfering  
94 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
005.0	050.0000	0143.7	064.2	251.1	006.0000	0092.3	006.2	86.11	
006.0	050.0000	0142.2	064.0	243.8	006.0000	0092.0	005.3	88.82	
007.0	050.0000	0140.1	063.7	233.0	006.0000	0087.9	004.6	90.74	
008.0	050.0000	0138.0	063.4	219.1	006.0000	0087.4	004.1	92.44	
009.0	050.0000	0136.1	063.1	203.1	006.0000	0086.3	003.9	93.03	
010.0	050.0000	0134.9	062.9	187.1	006.0000	0093.6	004.0	93.39	
011.0	050.0000	0134.3	062.8	172.5	006.0000	0115.9	004.3	93.95	
012.0	050.0000	0134.4	062.8	160.0	006.0000	0109.3	004.8	91.92	
013.0	050.0000	0134.7	062.9	149.9	005.9926	0096.5	005.4	88.79	
014.0	050.0000	0135.0	062.9	142.2	005.3652	0090.2	006.2	85.30	
015.0	050.0000	0135.5	063.0	136.4	004.4464	0090.8	007.1	82.18	

FMCommander Single Allocation Study - 07-16-2010 - NGDC 30 SEC  
 WOKL.P's Overlaps (In= 7.3 km, Out= 1.05 km)

WOKL.P CH 245 A 73.215 Z  
 Lat= 39 56 49.0, Lng= 84 11 29.0  
 6.0 kW 95 M HAAT, 373 M COR  
 Prot.= 60 dBu, Intef.= 48 dBu

WBNS-FM^ CH 246 B BLH19850125LM  
 Lat= 39 58 16.0, Lng= 83 01 40.0  
 Max CIs: 50.0 kW 150 M HAAT, 396 M COR  
 Prot.= 54 dBu, Intef.= 54 dBu



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Exhibit 18-B

Troy, OH

## WOKL.P vs. WBNS-FM

07-16-2010 NGDC 30 SEC Terrain Data

WBNS-FM BLH19850125LM

Channel = 246B

Max ERP = 50 kW

RCAMSL = 396 M

N. Lat. 39 58 16.0

W. Lng. 83 01 40.0

Protected

54 dBu

WOKL.P

Channel = 245A

Max ERP = 6 kW

RCAMSL = 373 M

N. Lat. 39 56 49.0

W. Lng. 84 11 29.0

Interfering

48 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
246.0	050.0000	0133.7	062.7	118.3	001.9310	0090.2	048.1	46.61	
247.0	050.0000	0133.5	062.7	117.5	001.8625	0090.3	047.2	46.77	
248.0	050.0000	0133.4	062.7	116.6	001.7918	0090.5	046.4	46.92	
249.0	050.0000	0133.3	062.7	115.6	001.7188	0090.6	045.6	47.06	
250.0	050.0000	0133.2	062.6	114.7	001.6435	0090.9	044.8	47.18	
251.0	050.0000	0133.1	062.6	113.6	001.5663	0091.1	044.1	47.28	
252.0	050.0000	0133.0	062.6	112.6	001.4872	0091.5	043.3	47.38	
253.0	050.0000	0132.9	062.6	111.4	001.4066	0092.0	042.6	47.45	
254.0	050.0000	0132.9	062.6	110.2	001.3246	0092.5	042.0	47.51	
255.0	050.0000	0132.8	062.6	109.0	001.2551	0093.1	041.4	47.58	
256.0	050.0000	0132.6	062.6	107.7	001.1879	0093.7	040.8	47.63	
257.0	050.0000	0132.5	062.5	106.4	001.1200	0094.3	040.2	47.65	
258.0	050.0000	0132.4	062.5	105.0	001.0517	0095.1	039.7	47.67	
259.0	050.0000	0132.2	062.5	103.5	000.9835	0096.0	039.3	47.66	
260.0	050.0000	0132.1	062.5	102.0	000.9156	0096.9	038.8	47.60	
261.0	050.0000	0132.1	062.5	100.5	000.8485	0097.5	038.4	47.50	
262.0	050.0000	0132.0	062.5	099.0	000.8094	0098.3	038.1	47.51	
263.0	050.0000	0132.0	062.5	097.4	000.7844	0099.1	037.8	47.57	
264.0	050.0000	0131.9	062.5	095.8	000.7593	0099.8	037.6	47.60	
265.0	050.0000	0131.8	062.4	094.1	000.7341	0100.6	037.4	47.61	
266.0	050.0000	0131.6	062.4	092.4	000.7091	0101.0	037.2	47.54	
267.0	050.0000	0131.5	062.4	090.8	000.6844	0101.3	037.2	47.46	
268.0	050.0000	0131.4	062.4	089.1	000.6789	0101.7	037.1	47.48	
269.0	050.0000	0131.3	062.4	087.4	000.6892	0101.7	037.1	47.54	
270.0	050.0000	0131.2	062.3	085.7	000.6995	0101.4	037.2	47.55	
271.0	050.0000	0131.1	062.3	084.0	000.7098	0100.7	037.3	47.51	
272.0	050.0000	0131.0	062.3	082.4	000.7201	0099.7	037.5	47.40	
273.0	050.0000	0130.8	062.3	080.8	000.7303	0098.5	037.7	47.26	
274.0	050.0000	0130.4	062.2	079.2	000.7570	0097.3	038.0	47.18	
275.0	050.0000	0130.1	062.2	077.6	000.7986	0096.4	038.3	47.18	
276.0	050.0000	0129.8	062.1	076.1	000.8403	0096.1	038.7	47.21	
277.0	050.0000	0129.4	062.1	074.6	000.8818	0096.0	039.1	47.23	
278.0	050.0000	0128.9	062.0	073.2	000.9224	0096.1	039.6	47.22	
279.0	050.0000	0128.3	061.9	071.9	000.9620	0096.3	040.2	47.19	
280.0	050.0000	0127.6	061.8	070.6	001.0009	0096.4	040.8	47.12	
281.0	050.0000	0127.0	061.7	069.3	001.0533	0096.1	041.4	47.06	
282.0	050.0000	0126.3	061.6	068.2	001.1169	0095.7	042.1	47.01	
283.0	050.0000	0126.0	061.5	067.0	001.1818	0095.5	042.7	46.98	
284.0	050.0000	0126.0	061.6	065.8	001.2481	0095.4	043.3	46.96	
285.0	050.0000	0126.5	061.6	064.7	001.3164	0095.3	044.0	46.94	