

PARTIAL PROOF OF PERFORMANCE

WFNT-AM STUDY

1470 KHZ, FLINT, MI

5 KW DAY / 1 KW NIGHT DA-2

PREPARED FOR CITADEL BROADCASTING COMPANY

WFBE-FM INSTALLATION

IN PROXIMITY TO THE AM STATION

REPORT PREPARED BY THE ENGINEERING FIRM

**MEDIA CONTROL, INCORPORATED
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MEDIA CONTROL INCORPORATED

AM STUDY -- ENGINEERING REPORT

BACKGROUND

This engineering report was prepared on behalf of the Citadel Broadcasting Company as required in FCC Construction Permit BPH-20070518ADJ for the installation of the WFBE-FM antenna and transmission line on the existing WTRX-AM north tower. The tower site is within 3.2 kilometers of the WFNT-AM transmitter site. This report presents a description of the WFNT-AM facility, the WFBE-FM installation, and the results of the WFNT-AM field measurements.

WFNT-AM OPERATIONS

WFNT-AM, Flint, MI is presently authorized directional daytime and nighttime operation on 1470 kHz with an operating power of 5.0 kilowatts and 1.0 kilowatt, respectively. The NAD 27 coordinates of the WFNT-AM antenna site are as follows:

Latitude North 42-58-22.0

Longitude West 83-32-24.0

WFBE-FM INSTALLATION SITE

The NAD27 coordinates of the WFBE-FM installation site are as follows:

Latitude North 42-58-26

Longitude West 83-39-01

The height of the existing self-supporting type tower is 112.7 meters above ground level. The structure is 0.847 kilometers (0.527 miles) at 278.4 degrees from the center of the WFNT-AM antenna site. No changes were made to the height of this tower.

WFNT-AM MEASUREMENT PROCEDURES

WFNT-AM field strength measurements were obtained along six (6) radials of the daytime and eight (8) radials of the nighttime arrays. These radials contain the licensed monitor points and a major lobe radial for the station. Measurements were obtained following the installation of the WFBE-FM antenna and transmission line on the WTRX-AM tower and the field measurements compared to the data in the WFNT-AM, October, 1994 proof of performance. For the nighttime measurements, WFNT-AM was contacted and agreed to switch to its nighttime array during daytime hours.

Measurements were obtained at accessible locations noted in the WFNT-AM Application for Direct Measurement of Power prepared in October, 1994. GPS navigation was used to maintain an accurate track along the radials and a description of each measurement location recorded.

FIELD STRENGTH MEASUREMENT ANALYSIS

The field strength measurement data (See Tables) were analyzed by radial bearing using the logarithmic average of the ratio of the field strength at each measurement location. The summary of the data is shown as a percentage change. The WFNT-AM licensed monitor points and antenna monitor readings are shown to be within FCC licensed limits.

FIELD METER

The FIM-21 field meter, Serial #1222, calibrated May 19, 2008, was used for these measurements. The meter was checked against the WTRX-AM meter and found to be in close agreement. The field meter was operated in accordance with the manufacturer's specifications.

CONCLUSION

There is no indication that this installation had any effect on the WFNT-AM daytime or nighttime arrays. Minor variations in the readings can be attributed to frozen ground in March compared to that of October, changes in the environment at the measurement locations, and variations in the meters. It is therefore our opinion that the installation had no impact on the WFNT-AM transmission facility operations and is not significant to the adjustment and maintenance of the WFNT-AM daytime and nighttime directional arrays.

AFFIDAVIT

The field intensity readings were made by the undersigned. The information contained in this report is true and correct according to my knowledge and belief. My qualifications are a matter of record with the FCC.

A handwritten signature in dark ink, reading "Russell C. Harbaugh, Jr.", is written over a horizontal line. The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Russell C. Harbaugh, Jr., P.E.

SUMMARY OF DAYTIME FIELD INTENSITY MEASUREMENTS
WFNT-AM - FLINT, MICHIGAN
1470 KHZ -- 5.0 KW DAY / 1.0 KW NIGHT -- DA-2

MONITOR POINT SUMMARY				
RADIAL AZIMUTH	POINT DISTANCE	BEFORE READING	AFTER READING	MAXIMUM FIELD
(DEGREES)	(km)	(MV/M)	(MV/M)	(MV/M)
063	5.63	7.4	8.2	8.7
085	6.97	6.5	5.5	10.5
110.5	3.80	7.0	7.0	8.5
147	3.68	21.1	16.5	25.0
209	5.54	10.0	9.0	17.8

SUMMARY OF PATTERN INVERSE DISTANCE FIELDS						
RADIAL AZIMUTH	1994 NON-D I.D.F.	1994 5 KW DAD AVERAGE	1994 5 KW DAD I.D.F.	2010 5 KW DAD AVERAGE	2010 5 KW DAD I.D.F.	AUGMENTED PATTERN I.D.F.
(DEGREES)	MV/M @ 1 KM	(RATIO)	MV/M @ 1 KM	MV/M @ 1 KM	MV/M @ 1 KM	MV/M @ 1 KM
063	230	0.3533	81.26	1.0470	85.08	99.78
085	220	0.4259	93.70	0.9973	93.45	163.63
110.5	220	0.2486	54.69	1.0902	59.63	64.37
147	230	0.7363	169.35	1.0224	173.14	201.17
209.0	240	0.3630	87.12	0.9109	79.36	169.11
327	232	5.0847	1179.65	0.9515	1122.44	1523.80

CHANGE POST to PRE CONSTRUCTION		
RADIAL (DEGREES)	2010/1994 AVERAGE	CHANGE (PERCENT)
063	1.0470	4.7%
085	0.9973	-0.3%
110.5	1.0902	9.0%
147	1.0224	2.2%
209.0	0.9109	-8.9%
327	0.9515	-4.9%

DAYTIME OPERATING vs. LICENSE PARAMETERS				
TOWER	PHASE	LICENSE	LOOP	LICENSE
	(DEGREES)	(DEGREES)	RATIO	RATIO
#1	-139.9	-139.5	0.489	0.485
#2	0.0	0.0	1.000	1.000
#3	+136.3	+136.0	0.507	0.495

WFNT-AM			DAYTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 063 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/26/1994		DATE: 3/8/2010		
5KW DA-D ARRAY			Full Proof of Performance Daytime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-D (mV/m)	EST Time	Post- Construction DA-D (mV/m)	LOG RATIO (DB)
308	2.32	3.73	1547	13.80	1549	11.5	-0.0792
309	2.62	4.21	1551	13.60	1546	10.5	-0.1123
310	3.08	4.96	1553	8.00	1541	12.0	0.1761
311(MP)	3.50	5.63	1555	7.40	1536	8.2	0.0446
312	4.93	7.94	1601	3.75	1528	4.3	0.0594
313	6.02	9.68	1605	2.07	1520	2.1	0.0062
314	6.87	11.06	1609	2.73	1516	3.0	0.0410
315	7.94	12.78	1614	2.21	1457	2.2	-0.0020
316	8.63	13.89	1620	1.80	1451	2.0	0.0458
	(MP) Maximum = 8.7 mVm			Average of Log Ratios:			0.0200
				Antilog of Average Log Ratio:			1.0470
				CHANGE =			4.70%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
308	Eastgate Streeet at Mailbox #3073						42-59-17.0 83-35-55.6
309	E. Atherton Road in driveway to house #6037						42-59-24.8 83-35-32.2
310	Cherry Lane at Mailbox #2424						42-59-35.8 83-35-07.6
311(MP)	Eugene Street in middle of driveway to house #2322						42-59-45.5 83-34-41
312	E. Lippincott 25 feet west of Mailbox #8095						43-00-19.1 83-33-09.1
313	Lapeer Road across street from house #9090 at "Do Not Pass" sign						43-00-44.5 83-32-01.4
314	Parkwood Boulevard across street from Mailbox #9470						43-01-04.8 83-31-07.3
315	Russell Alger Road in parking lot of Davison High School at "No Parking" sign						43-01-29.5 83-30-01.3
316	Elba Road at Mailbox #1318						43-01-45.3 83-29-17.8

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WFNT-AM			DAYTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 085 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/26/1994		DATE: 3/8/2010		
5KW DA-D ARRAY			Full Proof of Performance Daytime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-D (mV/m)	EST Time	Post- Construction DA-D (mV/m)	LOG RATIO (DB)
506	2.34	3.76	1229	14.80	1355	9.8	-0.1790
507	3.32	5.34	1231	12.50	1400	12.6	0.0035
508 (MP)	4.33	6.97	1234	6.50	1404	5.5	-0.0726
509	5.79	9.31	1238	5.18	1410	5.4	0.0181
510	6.78	10.91	1242	3.18	1415	4.5	0.1508
511	8.28	13.32	1248	3.30	1421	2.8	-0.0792
5812	9.30	14.96	1252	2.13	1428	2.2	0.0041
513	10.80	17.37	1259	1.21	1439	1.7	0.1451
	(MP) Maximum = 10.5 mVm			Average of Log Ratios:			-0.0012
				Antilog of Average Log Ratio:			0.9973
				CHANGE =			-0.27%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
506	Intersection of E Bristol Road and S. Belsay Road on southeast corner						42-58-31.4 83-35-36.8
507	S. Vassar Road at "Pass With Care" sign east of Mailbox #3477						42-58-38.6 83-34-27.4
508 (MP)	Intersection of S. Irish Road and Barder Road northeast corner on manhole cover						42-58-41.5 83-33-16.0
509	Center of Atlas Road at Mailbox #3389						42-58-48.1 83-31-34.2
510	S. State Road on south side of gas station -- Address #3355						42-58-52.7 83-30-23.8
511	S. Henderson Road south of Mailbox #3267 and 0.4 miles north of Bristol Road						42-58-58.9 83-28-38.6
5812	S. Washburn Road at turn arrow sign south of Mailbox #3248						42-59-04.3 83-27-26.7
513	S. Elba Road north of Sullivan Road at turn in road sign						42-59-10.3 83-25-41.1

WFNT-AM			DAYTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 110.5 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/26/1994		DATE: 3/8/2010		
5KW DA-D ARRAY			Full Proof of Performance Daytime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-D (mV/m)	EST Time	Post-Construction DA-D (mV/m)	LOG RATIO (DB)
606 (MP)	2.36	3.80	1505	7.00	1351	7.0	0.0000
607	3.05	4.90	1508	7.25	1345	6.5	-0.0474
608	3.58	5.76	1511	6.60	1339	6.8	0.0130
609	4.62	7.44	1514	4.50	1332	4.8	0.0280
610	5.98	9.62	1519	2.40	1324	3.3	0.1383
611	6.51	10.47	1521	1.70	1321	2.0	0.0706
612	7.33	11.80	1525	1.50	1317	1.8	0.0792
613	7.85	12.63	1527	1.15	1311	1.2	0.0185
	(MP) Maximum = 8.5 mVm			Average of Log Ratios:			0.0375
				Antilog of Average Log Ratio:			1.0902
				CHANGE =			9.02%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
606 (MP)	Maple Road at middle of driveway to house #5465						42-57-40.3 83-35-45.0
607	Wakefield Road at Mailbox #5139						42-57-26.0 83-35-01.1
608	S. Vassar Road across the street from Mailbox #5248 and 20 feet north						42-57-16.7 83-34-24.7
609	S. Irish Road Mailbox #5470 north of driveway						42-56-56.7 83-33-16.0
610	Atlas Roas across the street from sign 6158						42-56-33.7 83-31-46.0
611	Perry Road at Mailbox #9397						42-56-24.0 83-31-12.6
612	S. State Road at Mailbox #6423						42-56-08.2 83-30-17.0
613	Coolidge Road across the street from driveway to house #10507						42-55-59.0 83-29-45.0

WFNT-AM			DAYTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 147 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/25/1994		DATE: 3/8/2010		
5KW DA-D ARRAY			Full Proof of Performance Daytime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-D (mV/m)	EST Time	Post- Construction DA-D (mV/m)	LOG RATIO (DB)
805	1.90	3.06	1814	21.50	1222	17.0	-0.1020
806 (MP)	2.29	3.68	1811	21.10	1218	16.5	-0.1068
807	2.84	4.57	1806	24.10	1229	22.0	-0.0396
808	3.53	5.68	1803	15.50	1235	15.5	0.0000
809	4.70	7.57	1755	8.50	1247	9.8	0.0618
810	5.22	8.40	1753	7.30	1244	5.8	-0.0999
811	6.34	10.20	1749	4.55	1254	6.2	0.1344
812	6.96	11.20	1746	4.25	1258	7.2	0.2289
	(MP) Maximum = 25.0 mV/m			Average of Log Ratios:			0.0096
				Antilog of Average Log Ratio:			1.0224
				CHANGE =			2.24%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
805	Mailbox #5427 on Thrush Drive						42-56-58.1 83-37-08.2
806 (MP)	Grass strip 25' west of "Grand-Hill Center) parking lot west entrance						42-56-43.4 83-36-53.0
807	Mailbox #6282 on Kings Point Road						42-56-18.5 83-36-34.6
808	70' east of house #5317 Perry Road						42-55-48.0 83-36-08.1
809	Across street from Mailbox #8102 Manchester Drive						42-54-57.1 83-35-22.3
810	Mailbox #6221 McCandlish Road						42-54-34.5 83-35-02.7
811	Mailbox #9254 Vassar Road						42-53-45.3 83-34-19.4
812	E. Baldwin Road midway between Mailboxes #7140 and #7190						42-53-18.2 83-33-54.6

WFNT-AM			DAYTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 209 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/24/1994		DATE: 3/8/2010		
5KW DA-D ARRAY			Full Proof of Performance Daytime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-D (mV/m)	EST Time	Post-Construction DA-D (mV/m)	LOG RATIO (DB)
1109	1.80	2.90	0906	16.0	1033	15.5	-0.0138
1110	2.27	3.65	0912	15.0	1026	13.5	-0.0458
1111(MP)	3.44	5.54	0919	10.0	1017	9.0	-0.0458
1112	4.60	7.40	0929	5.50	1004	5.2	-0.0244
1113	5.83	9.38	0934	4.55	0958	4.0	-0.0560
1114	6.93	11.15	0940	3.90	0953	3.5	-0.0470
1115	8.07	12.99	0949	1.95	0945	2.0	0.0110
1116	9.05	14.56	0955	1.90	0936	1.5	-0.1027
	(MP) Maximum = 17.8 mV/m			Average of Log Ratios:			-0.0405
				Antilog of Average Log Ratio:			0.9109
				CHANGE =			-8.91%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
1109	Wildwood Circle across the street from mailbox to "Avante Barber Shop"						42-57-00.1 83-39-26.4
1110	E. Hill Road at tree back of 2290 sign						42-56-40.0 83-39-40.9
1111(MP)	Ried Road across street from Mailbox #1480						42-55-46.8 83-40-21.7
1112	E. Grand Blanc Road 20 feet north of "Thornridge Apartment" sign						42-54-54.2 83-41-01.9
1113	McCall Road at Mailbox #9038						42-53-58.5 83-41-43.5
1114	Baldwin Road at Mailbox #1400						42-53-08.6 83-42-21.5
1115	W. Ray Road 1.0 mile west of Fenton Road and 170 feet west of unmarked mailbox						42-52-15.0 83-43-01.6
1116	N. Long Lake Road across street from Mailboxes #2521, #1480, #1142, etc						42-51-30.6 83-43-34.9

WFNT-AM			DAYTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 327 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/25/1994		DATE: 3/8/2010		
5KW DA-D ARRAY			Full Proof of Performance Daytime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-D (mV/m)	EST Time	Post- Construction DA-D (mV/m)	LOG RATIO (DB)
1507	1.32	2.12	1341	440.0	1558	420	-0.0202
1508	2.14	3.44	1345	200.0	1604	200	0.0000
1509	2.77	4.45	1403	110.0	1615	105	-0.0202
1510	3.63	5.84	1416	115.0	1621	110	-0.0193
1511	4.82	7.76	1427	86.0	1631	76.0	-0.0537
1512	5.79	9.31	1432	37.5	1638	36.0	-0.0177
1513	7.05	11.34	1443	22.5	1646	26.5	0.0711
1514	8.37	13.47	1451	35.0	1654	27.0	-0.1127
	Main Lobe Radial			Average of Log Ratios:			-0.0216
				Antilog of Average Log Ratio:			0.9515
				CHANGE =			-4.85%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
1507	"Red Wagon" restaurant west edge of parking lot 5 parking spaces north from E. Atherton Road						42-59-22.2 83-39-17.4
1508	Across the street from driveway to house #1516 Woodslea Drive						42-59-58.1 83-39-47.5
1509	In front of house #1977 Howard Avenue						43-00-22.3 83-40-08.4
1510	Avon Sreet west of E. Court Street 20' east of "Dead End" sign						43-01-02.6 83-40-42.6
1511	House #720 Wilberforce Drive in driveway						43-01-54.2 83-41-28.5
1512	"Stop Sign" on northeast corner of E. Genesee and Alexander Street intersection						43-02-35.3 83-42-45.1
1513	In front of house #4906 Edwards Avenue						43-03-31.2 83-42-43.2
1514	Building #G2408 W. Carpenter Road next to canopy & back of "Wakati" sign						43-04-31.1 83-43-45.7

MEDIA CONTROL, INCORPORATED

SUMMARY OF NIGHTTIME FIELD INTENSITY MEASUREMENTS
WFNT-AM - FLINT, MICHIGAN
1470 KHZ -- 5.0 KW DAY / 1.0 KW NIGHT -- DA-2

MONITOR POINT SUMMARY				
RADIAL AZIMUTH	POINT DISTANCE	BEFORE READING	AFTER READING	MAXIMUM FIELD
(DEGREES)	(km)	(MV/M)	(MV/M)	(MV/M)
049	2.71	8.6	9.8	19.3
079	2.10	33.0	28.5	59.7
117	3.78	7.25	6.2	19.5
147	3.68	12.0	9.4	15.0
179	3.18	3.2	3.2	5.2
217	2.59	16.0	17.0	24.0
245	3.15	11.0	10.0	12.4

SUMMARY OF PATTERN INVERSE DISTANCE FIELDS						
RADIAL AZIMUTH	1994 NON-DA I.D.F.	1994 1 KW DAD AVERAGE	1994 1 KW DAD I.D.F.	2010 1 KW DAD AVERAGE	2010 1 KW DAD I.D.F.	AUGMENTED PATTERN I.D.F.
(DEGREES)	MV/M @ 1 KM	(RATIO)	MV/M @ 1 KM	MV/M @ 1 KM	MV/M @ 1 KM	MV/M @ 1 KM
049	250	0.1097	27.43	1.0270	28.2	548.54
079	220	0.4827	106.19	0.9372	99.5	223.57
117	250	0.1328	33.20	0.9357	31.1	157.86
147	230	0.4207	96.76	0.9623	93.1	100.97
179	240	0.2027	48.65	1.0110	49.2	139.39
217	230	0.4118	94.71	1.0923	103.5	82.93
245	190	0.3143	59.72	1.0352	61.8	151.26
327	232	1.9263	446.90	1.2061	539.0	511.89

CHANGE POST to PRE CONSTRUCTION		
RADIAL (DEGREES)	2010/1994 AVERAGE	CHANGE (PERCENT)
049	1.0270	2.7%
079	0.9372	-6.3%
117.0	0.9357	-6.4%
147	0.9623	-3.8%
179	1.0110	1.1%
217	1.0923	9.2%
245	1.0352	3.5%
327	1.2061	20.6%

NIGHTTIME OPERATING vs. LICENSE PARAMETERS				
TOWER	PHASE	LICENSE	LOOP	LICENSE
	(DEGREES)	(DEGREES)	RATIO	RATIO
#1	-154.4	-154.0	0.620	0.620
#2	0.0	0.0	1.000	1.000
#3	+145	+143	0.620	0.620

WFNT-AM			NIGHTTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 049 DEGREES		
FLINT, MICHIGAN								
1470 KHZ			DATE: 8/19/1994		DATE: 3/9/2010			
1KW DA-N ARRAY			Full Proof of Performance Nighttime DA		BY: <u>Russell C. Harbaugh, Jr.</u>			
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	EST Time	Post- Construction DA-N (mV/m)	LOG RATIO (DB)	
207 (MP)	1.68	2.71	0956	8.60	1347	9.80	0.0567	
208	3.03	4.88	1004	2.65	1353	2.70	0.0081	
209	4.10	6.59	1010	1.00	1356	1.40	0.1461	
210	4.89	7.87	1017	1.35	1404	1.35	0.0000	
211	5.62	9.04	1022	1.90	1408	1.15	-0.2181	
212	6.49	10.45	1027	0.50	1413	0.64	0.1072	
213	8.01	12.89	1036	0.21	1420	0.32	0.1829	
214	9.56	15.39	1046	0.31	1426	0.20	-0.1903	
	(MP) Maximum = 19.3 mV/m			Average of Log Ratios:			0.0116	
				Antilog of Average Log Ratio:			1.0270	
				CHANGE =			2.70%	
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)	
207 (MP)	S. Genesee Road .5 miles south of Atherton Road and 25' west in field next to doctor's office						42-59-22.2 83-36-52.5	
208	S. Belsay Road north of house #2127 at "45 mph" & "25 mph" signs						43-00-05.0 83-35-41.4	
209	Intersection of Lapeer Road & Rinn Street at fire hydrant						43-00-41.5 83-34-43.55-	
210	Mail box #56 on E. Court Street at east end of bridge						43-01-09.6 83-33-58.8	
211	Irish Road at Mailbox #1260 at doctor's office						43-01-34.2 83-33-21.0	
212	Davison Road and Old Hickory Boulevard in center of island						43-02-04.3 83-32-35.9	
213	E. Potter Road across the street from MDOT building #9495						43-02-56.9 83-31-11.0	
214	E. Richfield Road at Mailbox #11047						43-03-50.1 83-29-48.2	

WFNT-AM FLINT, MICHIGAN 1470 KHZ 1KW DA-N ARRAY			NIGHTTIME FIELD INTENSITY MEASUREMENTS		RADIAL = 079 DEGREES		
			DATE: 8/21/1994 Full Proof of Performance Nighttime DA		DATE: 3/9/2010 BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post-Construction DA-N (mV/m)	LOG RATIO (DB)
406 (MP)	1.31	2.10	1543	33.00	1521	28.50	-0.0637
407	2.37	3.81	1547	16.70	1516	15.50	-0.0324
408	3.36	5.41	1551	10.80	1512	9.60	-0.0512
409	4.40	7.08	1555	7.80	1507	6.40	-0.0859
410	5.87	9.45	1558	6.40	1502	5.90	-0.0353
411	6.86	11.03	1601	3.90	1458	3.20	-0.0859
412	7.39	11.89	1605	3.38	1454	2.80	-0.0818
413	8.38	13.48	1608	1.20	1449	1.95	0.2109
	(MP) Maximum = 59.7 mV/m			Average of Log Ratios:			-0.0282
				Antilog of Average Log Ratio:			0.9372
				CHANGE =			-6.28%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
406 (MP)	S. Genesee Road of 0.15 miles north of E. Bristol Road in school parking lot near a light pole with painted markings on the pavement (mark obscured by snow)						42-58-37.0 83-36-51.3
407	S. Belsay Road at Mailbox #3381						42-58-46.0 83-35-38.1
408	S. Vassar Road at Mailbox #3309						42-58-55.2 83-34-28.4
409	S. Irish Road at Mailbox #3202						42-59-06.2 83-33-17.0
410	Middle of Atlas Road at "Stop Sign Ahead" sign						42-59-19.9 83-31-34.4
411	S. State Road (M15) at Mailbox #2589						42-59-30.0 83-30-25.1
412	S. Oak Road at Mailbox #2458						42-59-36.0 83-29-49.8
413	S. Henderson Road at Mailbox #2393						42-59-44.8 83-28-40.0

MEDIA CONTROL, INCORPORATED

WFNT-AM			NIGHTTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 117 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/19/1994		DATE: 3/10/2010		
1KW DA-N ARRAY			Full Proof of Performance Nighttime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post-Construction DA-N (mV/m)	LOG RATIO (DB)
706	1.84	2.96	1505	7.00	1210	7.30	0.0182
707 (MP)	2.35	3.78	1508	7.25	1202	6.20	-0.0679
708	3.21	5.17	1511	6.60	1156	5.40	-0.0872
709	3.78	6.08	1514	4.50	1147	4.20	-0.0300
710	5.13	8.26	1519	2.40	1142	3.00	0.0969
711	6.03	9.70	1521	1.70	1139	1.50	-0.0544
712	7.17	11.53	1525	1.50	1134	1.50	0.0000
713	7.88	12.68	1527	1.15	1132	0.90	-0.1065
	(MP) Maximum = 19.5 mV/m			Average of Log Ratios:			-0.0288
				Antilog of Average Log Ratio:			0.9357
				CHANGE =			-6.43%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
706	E. Maple Road across street from west entrance to "Revival Tabernacle" #5141 at "Gas" marker						42-57-39.3 83-36-29.5
707 (MP)	Belsay Road o.25 miles south of E. Maple Road east side of road in line with wooden pole						42-57-26.1 83-35-54.1
708	Wakefield Road across the street from Mailbox #5359						42-57-06.1 83-35-00.1
709	S. Vassar Road at Mailbox #5490						42-56-52.3 83-34-24.0
710	Perry Road at Mailbox #8103						42-56-21.2 83-33-06.0
711	Gale Road center of driveway to house #6482						42-55-59.7 83-32-03.4
712	Dutch Road at Mailbox #7277						42-55-32.8 83-30-51.4
713	M15 S. State Road center of bridge and north of #7485 "Pytel Veterinary Clinic" sign						42-55-16.0 83-30-06.4

MEDIA CONTROL, INCORPORATED

WFNT-AM			NIGHTTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 147 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/21/1994		DATE: 3/9/2010		
1KW DA-N ARRAY			Full Proof of Performance Nighttime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post- Construction DA-N (mV/m)	LOG RATIO (DB)
805	1.90	3.06	0933	10.50	1550	10.00	-0.0212
806 (MP)	2.29	3.68	0935	12.00	1554	9.40	-0.1061
807	2.84	4.57	0939	9.60	1601	9.30	-0.0138
808	3.53	5.68	0943	7.70	1605	8.20	0.0273
809	4.70	7.57	0951	4.65	1615	4.60	-0.0047
810	5.22	8.40	0954	4.00	1620	4.20	0.0212
811	6.34	10.20	0957	2.50	1624	2.40	-0.0177
812	6.96	11.20	1000	2.40	1627	2.30	-0.0185
	(MP) Maximum = 15.0 mV/m			Average of Log Ratios:			-0.0167
				Antilog of Average Log Ratio:			0.9623
				CHANGE =			-3.77%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
805	Mailbox #5427 on Thrush Drive						42-56-58.1 83-37-08.2
806 (MP)	Grass strip 25' west of "Grand-Hill Center) parking lot west entrance						42-56-43.4 83-36-53.0
807	Mailbox #6282 on Kings Point Road						42-56-18.5 83-36-34.6
808	70' east of house #5317 Perry Road						42-55-48.0 83-36-08.1
809	Across street from Mailbox #8102 Manchester Drive						42-54-57.1 83-35-22.3
810	Mailbox #6221 McCandlish Road						42-54-34.5 83-35-02.7
811	Mailbox #9254 Vassar Road						42-53-45.3 83-34-19.4
812	E. Baldwin Road midway between Mailboxes #7140 and #7190						42-53-18.2 83-33-54.6

MEDIA CONTROL, INCORPORATED

WFNT-AM			NIGHTTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 179 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/21/1994		DATE: 3/10/2010		
1KW DA-N ARRAY			Full Proof of Performance Nighttime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post- Construction DA-N (mV/m)	LOG RATIO (DB)
906 (MP)	1.98	3.18	1417	3.20	1316	3.20	0.0000
907	2.66	4.28	1421	3.00	1326	3.20	0.0280
908	3.20	5.15	1428	2.50	1330	2.20	-0.0555
909	4.85	7.81	1223	2.25	1340	2.10	-0.0300
910	5.97	9.61	1216	1.90	1346	1.65	-0.0613
911	6.97	11.22	1210	1.60	1353	1.75	0.0389
912	7.81	12.56	1206	1.10	1359	1.40	0.1047
913	8.54	13.74	1203	0.97	1402	1.00	0.0132
	(MP) Maximum = 5.2 mV/m			Average of Log Ratios:			0.0048
				Antilog of Average Log Ratio:			1.0110
				CHANGE =			1.10%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
906 (MP)	"Maple Cemetery" on E. Hill Road on drive inline with Ried's tombstone & wood utility pole						42-56-39.0 83-38-21.7
907	East side of S. Saginaw Road #10801D at brick sign						42-56-06.3 83-38-21.0
908	Grand Oak Drive north of E. Reid Road between building signs 535 and 605						42-55-35.9 83-38-20.3
909	East Cook Road at Mailbox #3344						42-54-10.0 83-38-18.1
910	E. Baldwin Road across the street from Mailbox #3330 at fire hydrant						42-53-12.2 83-38-15.7
911	Ray Road east of driveway to house #3393						42-52-20.8 83-38-15.4
912	Belford Road 200 feet west of Mailbox #3418						42-51-37.0 83-38-14.5
913	Mitchell Road midway between Pecos Lane and N. Holly Road & 0.1 mile west of N. Holly Road						42-50-58.4 83-38-13.5

WFNT-AM FLINT, MICHIGAN			NIGHTTIME FIELD INTENSITY MEASUREMENTS		RADIAL = 217 DEGREES		
1470 KHZ 1KW DA-N ARRAY			DATE: 8/19/1994 Full Proof of Performance Nighttime DA		DATE: 3/10/2010 BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post-Construction DA-N (mV/m)	LOG RATIO (DB)
1207(MP)	1.61	2.59	0945	16.00	1508	17.00	0.0263
1208	2.06	3.32	1000	15.00	1504	16.10	0.0307
1209	2.51	4.04	1007	8.90	1459	14.00	0.1967
1210	2.95	4.75	1014	11.00	1450	10.20	-0.0328
1211	3.78	6.09	1032	9.20	1438	8.20	-0.0500
1212	5.03	8.09	1039	4.30	1433	5.40	0.0989
1213	6.33	10.18	1046	4.20	1427	4.50	0.0300
1214	7.94	12.77	1051	3.20	1421	3.25	0.0067
	(MP) Maximum = 24.0 mV/m			Average of Log Ratios:			0.0383
				Antilog of Average Log Ratio:			1.0923
				CHANGE =			9.23%
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)
1207(MP)	Back of bowling ally on Saginaw Street back of building at storm drain grate						42-57-17.2 83-39-31.2
1208	Fern Avenue at Mailbox #5333						42-56-59.8 83-39-49.2
1209	E. Hill Road at Mailbox #2079						42-56-39.4 83-40-09.7
1210	Crestwood Memorial Cemetery at Jacob Headstone on far back road						42-56-19.1 83-40-30.8
1211	E. Reid Road across street from driveway to house #1183						42-55-46.1 83-41-04.3
1212	W. Grand Blanc Road at Mailbox #1215						42-54-54.6 83-41-55.1
1213	W. Cook Road center of driveway to house #2106						42-54-00.9 83-42-52.6
1214	Baldwin Road 100 feet west of Torrey Road						42-53-07.1 83-43-47.8

MEDIA CONTROL, INCORPORATED

WFNT-AM			NIGHTTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 245 DEGREES		
FLINT, MICHIGAN								
1470 KHZ			DATE: 8/20/1994		DATE: 3/9/2010			
1KW DA-N ARRAY			Full Proof of Performance Nighttime DA		BY: <u>Russell C. Harbaugh, Jr.</u>			
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post-Construction DA-N (mV/m)	LOG RATIO (DB)	
1310(MP)	1.96	3.15	1018	11.00	1150	10.0	-0.0414	
1311	2.98	4.79	1023	7.80	1144	8.5	0.0373	
1312	4.10	6.59	1032	6.80	1138	7.0	0.0126	
1313	5.18	8.34	1038	5.70	1131	5.9	0.0150	
1314	6.28	10.10	1046	3.90	1126	4.2	0.0322	
1315	7.36	11.85	1050	3.10	1121	3.7	0.0768	
1316	8.47	13.63	1055	1.95	1118	2.0	0.0110	
1317	9.58	15.41	1059	1.90	1116	1.8	-0.0235	
	(MP) Maximum = 12.4 mV/m			Average of Log Ratios:			0.0150	
				Antilog of Average Log Ratio:			1.0352	
				CHANGE =			3.52%	
POINT NO.	DESCRIPTION OF MEASUREMENT POINT						COORDINATES (NAD 27)	
1310(MP)	North of E. Maple Avenue, eastern parking lot of "Seventh Day adventist Church" reading at northeast corner of parking lot						42-57-38.5 83-40-30.6	
1311	Fenton Road in Kroger parking lot north side next to light pole						42-57-17.4 83-41-33.2	
1312	Van Slyke Road at Mailbox #5401						42-56-53.4 83-42-44.1	
1313	Torrey Road at Mailbox #6083						42-56-29.1 83-43-54.1	
1314	S. Jennings Road east side north of house #6065 across street from small barn						42-56-04.3 83-45-03.8	
1315	Linden Road in front of house #7024 at manhole cover						42-55-40.3 83-46-14.2	
1316	Sharp Road across the street from Mailbox #7252						42-55-16.6 83-47-24.5	
1317	Elms Road on ease side opposite shed doors at house #7491						42-54-52.8 83-48-35.8	

MEDIA CONTROL, INCORPORATED

WFNT-AM			NIGHTTIME FIELD INTENSITY MEASUREMENTS			RADIAL = 327 DEGREES	
FLINT, MICHIGAN							
1470 KHZ			DATE: 8/22/1994		DATE: 3/9/2010		
1KW DA-N ARRAY			Full Proof of Performance Nighttime DA		BY: <u>Russell C. Harbaugh, Jr.</u>		
POINT NO.	DISTANCE (MILES) (KM)		EDT Time	DA-N (mV/m)	Time	Post- Construction DA-N (mV/m)	LOG RATIO (DB)
1507	1.32	2.12	0933	130.0	1246	170.0	0.1165
1508	2.14	3.44	0939	55.0	1250	82.0	0.1735
1509	2.77	4.45	1000	31.0	1257	45.0	0.1619
1510	3.63	5.84	1011	36.0	1302	28.0	-0.1091
1511	4.82	7.76	1019	29.5	1311	33.0	0.0487
1512	5.79	9.31	1025	13.0	1315	16.0	0.0902
1513	7.05	11.34	1033	6.6	1320	11.5	0.2412
1514	8.37	13.47	1042	9.2	1326	7.8	-0.0717
	Major Lobe Radial			Average of Log Ratios:			0.0814
				Antilog of Average Log Ratio:			1.2061
				CHANGE =			20.61%
POINT NO.							COORDINATES (NAD 27)
1507	"Red Wagon" restaurant west edge of parking lot 5 parking spaces north from E. Atherton Road						42-59-22.2 83-39-17.4
1508	Across the street from driveway to house #1516 Woodslea Drive						42-59-58.1 83-39-47.5
1509	In front of house #1977 Howard Avenue						43-00-22.3 83-40-08.4
1510	Avon Sreet west of E. Court Street 20' east of "Dead End" sign						43-01-02.6 83-40-42.6
1511	House #720 Wilberforce Drive in driveway						43-01-54.2 83-41-28.5
1512	"Stop Sign" on northeast corner of E. Genesee and Alexander Street intersection						43-02-35.3 83-42-45.1
1513	In front of house #4906 Edwards Avenue						43-03-31.2 83-42-43.2
1514	Building #G2408 W. Carpenter Road next to canopy & back of "Wakati" sign						43-04-31.1 83-43-45.7