TECHNICAL STATEMENT
IN SUPPORT OF
APPLICATION FOR LICENSE TO COVER
BXPH-20110816AAO
WJYE CH-241B
BUFFALO, NEW YORK

FACILITY I.D. 1915

4.7 KW – 195 METERS HAAT

This instant application is being submitted on behalf of Townsquare Media of Buffalo Inc., licensee of the above referenced FM Broadcast Station.

It should be noted that the subject antenna has been previously installed and operating under authorization BLH-20061114AAM issued to WBUF, FCC Facility 53699, Buffalo, New York.

The outstanding construction permit issued to WJYE has six (6) conditions that must be met before program tests are authorized.

Condition #1: "Spurious emissions requirements of 47 C.F.R. Sections 73.317(b) through 73.317(d)". These measurements were conducted by Mr. William Stachowiak, Chief Engineer for WJYE. Mr. Stachowiak is fully experienced and qualified in the making of such measurements. The results of these measurements are included herein as Exhibit-A-.

Condition #2: "Complete proof-of-performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components". These measurements were conducted by Mr. Robert Surette of Shively Labs whose qualifications are a matter of record with the Commission. The results of these measurements are included herein as Exhibit -B-.

Condition #3: "An affidavit from a licensed surveyor to establish that the directional antenna has been oriented at the proper azimuth". This affidavit was extracted from BLH-20061114AAM and is included herein as Exhibit -C-.

Condition #4: "An affidavit that the installation of the antenna system was overseen by a qualified engineer". This affidavit was also extracted from BLH-20061114AAM and is included herein as Exhibit -D-.

Condition #5: See Exhibit -B-.

Condition #6: “The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields is excess of FCC guidelines”. The applicant agrees to abide by the forgoing statement.

The tower is properly fenced and locked. Signs warning of potential radio frequency radiation (RFR) hazards are strategically placed.

It is believed by the applicant and the undersigned that all conditions placed on the outstanding construction permit have been met and Program Test Authority is hereby requested.

Signed: Fred W. Greaves Jr.
Technical Consultant
June 6, 2013

EXHIBIT -A-

14 Lafayette Square
Suite 1200
Buffalo, NY 14203

REF: In reference to Shively FM Antenna System and the following Radio Station:

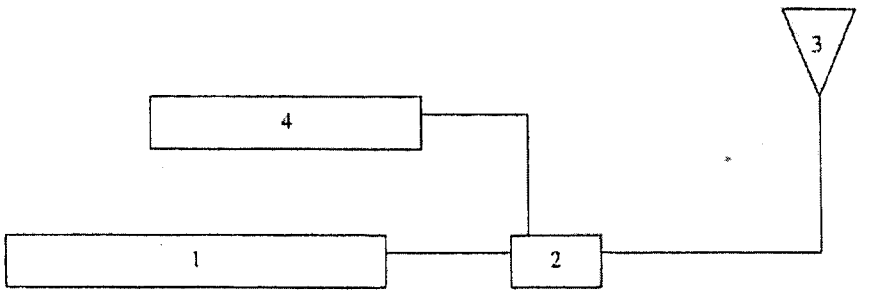
WBLK-FM – 93.7 MHz. (Analog transmitter) 2500 watts

WJYE-FM- 96.1 MHz. (Analog transmitter) 2500 watts

WYRK-FM- 106.5 MHz. (Analog transmitter) 2500 watts

WBUF-FM- 92.9 MHZ. (HD transmitter) 360 watts

On the morning of May 29, 2013, measurements were made by myself using the equipment annotated below pursuant to the spurious emissions requirements of 47 C.F.R. Sections 73.317(b) through 73.317(d). All measurements were made with all stations simultaneously utilizing the shared Shively Model 6014-2/2-DA Directional Panel Antenna and were operating at their licensed and/or proposed power.



1). SO 29244D Station Combining System

2). Directional Coupler (part of combining system assembly)

3). Shively Labs Model 6014-2/2-DA Directional Panel Antenna System

4). IFR Spectrum Analyzer Model: COM 120B, S/N: 500009806

Shively Labs
a division of Howell Laboratories,Inc.

- An Employee-Owned Company -

EXHIBIT -B-

P. O. Box 389 Harrison Rd.,
Bridgton, Maine 04009 USA

(207) 647-3327
888-SHIVELY
Fax: (207) 647-8273
E-mail: sales@shively.com
Web site: www.shively.com

S.O. 30665

Report of Test 6014-2/2-DA

for

Townsquare Media of Buffalo, Inc.

WJYE 96.1 MHz Buffalo, NY

OBJECTIVE:

The objective of this test was to demonstrate the directional characteristics of a 6014-2/2-DA to meet the needs of WJYE and to comply with the requirements of the FCC construction permit, file number BXPH-20110816AAO. This test characterizes only the radiation characteristics of the antenna when mounted on the tower as described. It does not represent or imply any guarantee of specific coverage which can be influenced by factors beyond the scope of this test.

RESULTS:

The following Figures are the results of the measurements from our pattern range:

Figure 1A - Measured Azimuth Pattern with the FCC Composite
Figure 1B - Measured Composite Azimuth Pattern with the FCC Composite
Figure 1C - Tabulation of the Horizontal Polarization for the Measured Azimuth Pattern
Figure 1D - Tabulation of the Vertical Polarization for the Measured Azimuth Pattern
Figure 1E - Tabulation of the Measured Composite Azimuth Pattern
Figure 1F - Tabulation of the FCC Composite

The calculated elevation pattern of the antenna is shown in Figure 3.

Construction permit file number BXPH-20110816AAO indicates that the Horizontal radiation component shall not exceed 4.7 kW at any azimuth and is restricted to the following values at the azimuths specified:

280 - 290 Degrees True: 0.047 kilowatt

From Figure 1A, the maximum radiation of the Horizontal component occurs at 190 Degrees True to 196 Degrees True. At the restricted azimuth of 280 -290 Degrees True the Vertical component is 22.499 dB down from the maximum of 4.7 kW, or 0.026 kW.

The R.M.S. of the Horizontal component is 0.615. The total Horizontal power gain is 2.744. The R.M.S. of the Vertical component is 0.591. The total Vertical power gain is 2.689. See Figure 4 for calculations. The R.M.S. of the FCC composite pattern is 0.723. The R.M.S. of the measured composite pattern is 0.633. Eighty-five percent (85%) of the original authorized FCC composite pattern is 0.614. Therefore this pattern complies with the FCC requirement of 73.316(c)(2)(ix)(A).

METHOD OF DIRECTIONALIZATION:

One bay of the 6014-2/2-DA was mounted on a tower of precise scale to the Western Antenna & Tower Service tower at the WJYE site. The spacing of the antenna to the tower was varied to achieve the horizontal and vertical patterns shown in Figure 1A. See Figure 2 for mechanical details.

METHOD OF MEASUREMENT:

As allowed by the construction permit, file number BXPH-20110816AAO, a single level of the 6014-2/2-DA was set up on the Shively Labs scale model antenna pattern measuring range. A scale of 4.5:1 was used.

SUPERVISION:

Mr. Surette was graduated from Lowell Technological Institute, Lowell, Massachusetts in 1973 with the degree of Bachelor of Science in Electrical Engineering. He has been directly involved with design and development of broadcast antennas, filter systems and RF transmission components since 1974. As an RF Engineer for six years with the original Shively Labs in Raymond, ME and for a short period of time with Dielectric Communications.
He is currently an Associate Member of the AFCCE and a Senior Member of IEEE.

He has authored a chapter on filters and combining systems for the latest edition of the CRC Electronics Handbook and for the 9th and 10th Editions of the NAB Handbook.

EQUIPMENT:

The scale model pattern range consists of a wooden rotating pedestal equipped with a position indicator. The scale model bay is placed on the top of this pedestal and is used in the transmission mode at approximately 20 feet above ground level. The receiving corner reflector is spaced 50 feet away from the rotating pedestal at the same level above ground as the transmitting model. The transmitting and receiving signals are carried to a control building by means of RG-9/U double shielded coax cable.

The control building is equipped with:

Hewlett Packard Model 8753 Network Analyzer

PC Based Controller

Hewlett Packard 7550A Graphics Plotter

All testing is carried out in strict accordance with approved procedures under our ISO9001:2008.

TEST PROCEDURES:

The receiving antenna system is mounted so that the horizontal and vertical azimuth patterns are measured independently. The network analyzer was set to 432.45 MHz Calibrated pads are used to check the linearity of the measuring system. For example, 6 dB padding yields a scale reading of 50 from an unpadded reading of 100 in voltage. From the recorded patterns, the R.M.S. values are calculated and recorded as shown in Figure 1A.

Respectfully submitted by:

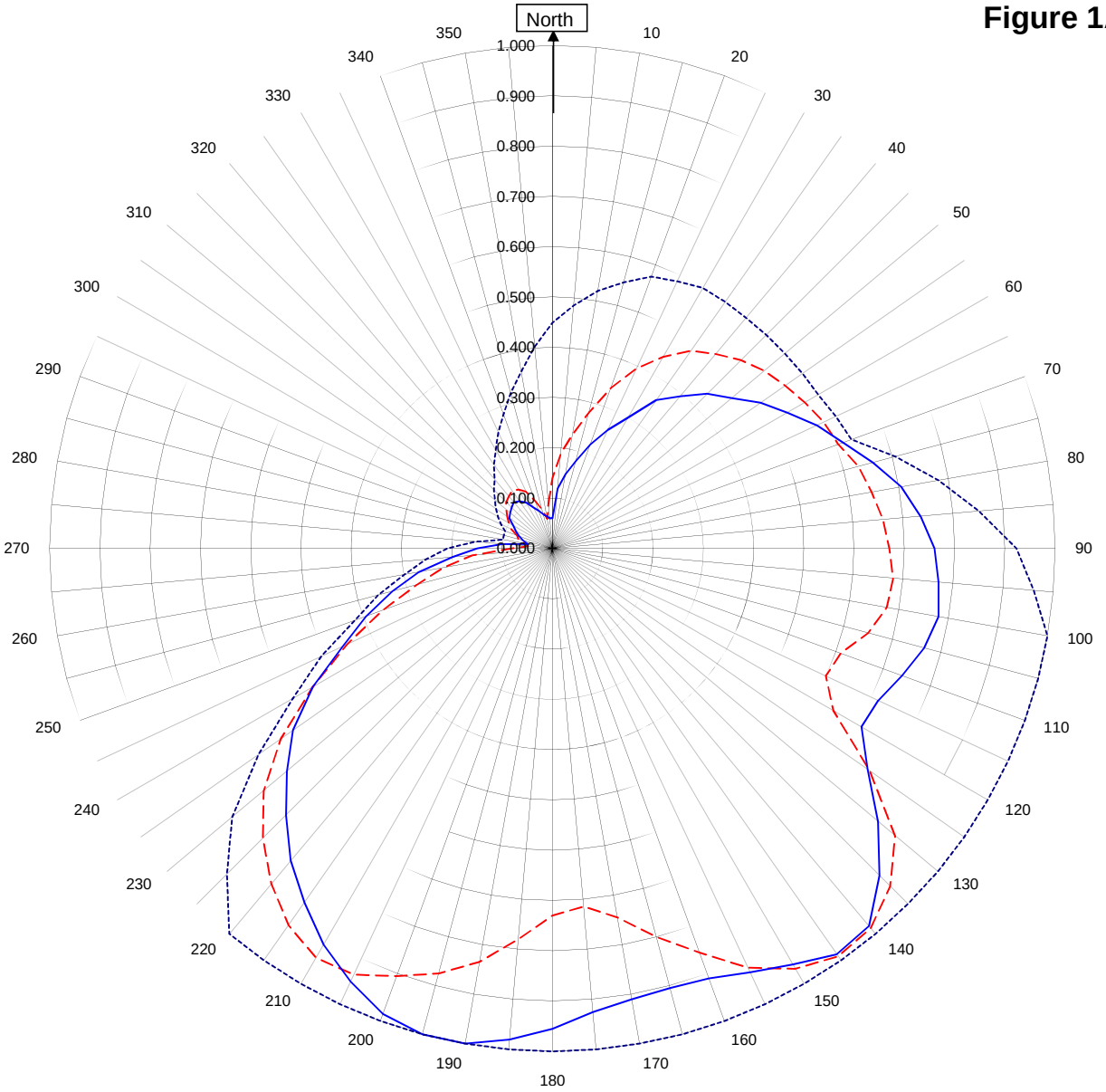
Robert A. Surette
Director of Sales Engineering
S/O 30665
July 25, 2013

EXHIBIT -B-

Shively Labs

Shively Labs, a division of Howell Laboratories, Inc. Bridgton, ME (207)647-3327

Figure 1A



WJYE BUFFALO, NY.

30665

July 25, 2013

Horizontal RMS	0.615
Vertical RMS	0.591
H/V Composite RMS	0.633
FCC Composite RMS	0.723

Frequency	96.1 / 432.45 mHz
Plot	Relative Field
Scale	4.5 : 1
	See Figure 2 for Mechanical Details

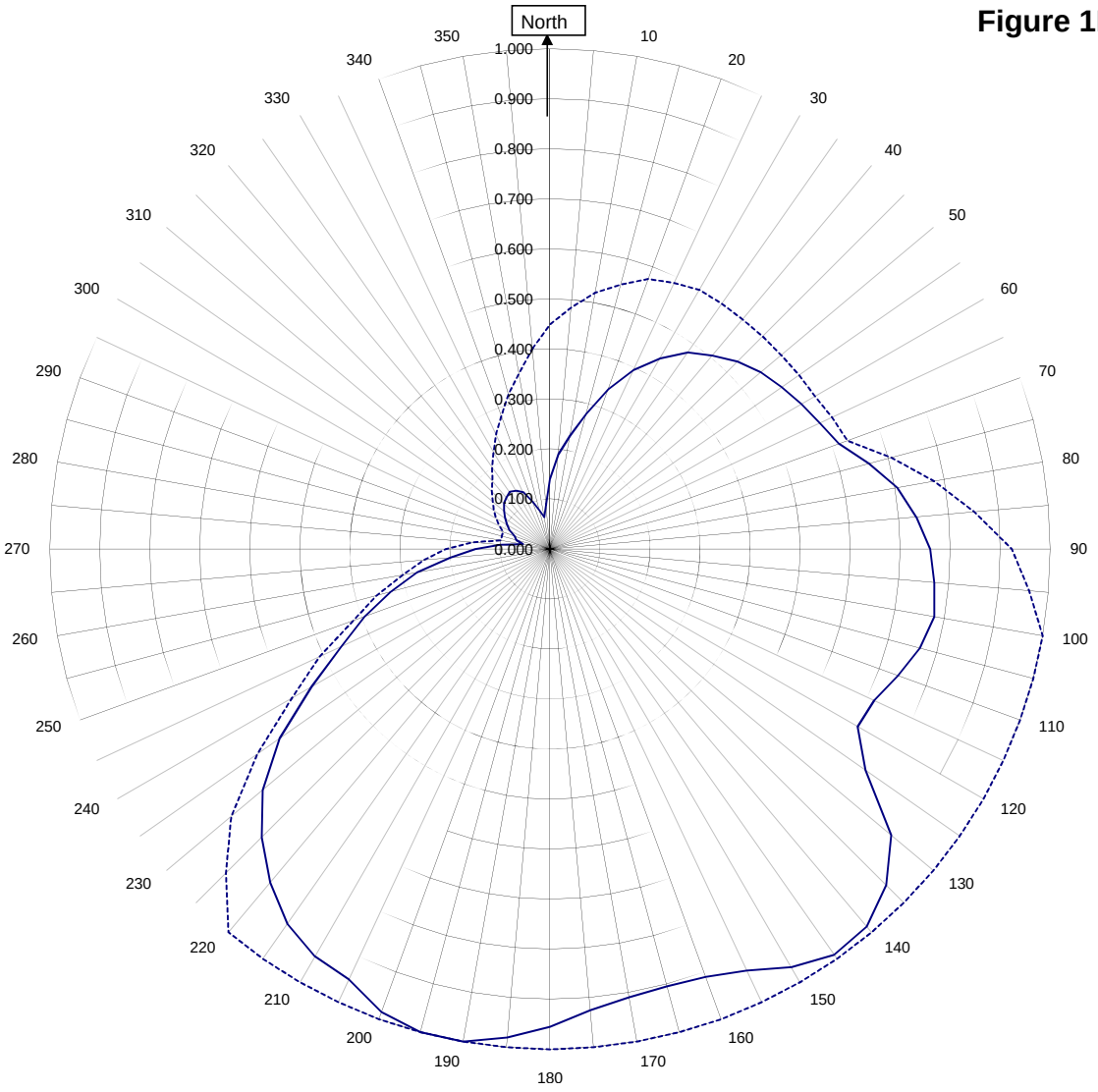
Antenna Model	6014-2/2-DA
Pattern Type	Directional Azimuth

EXHIBIT -B-

Shively Labs

Shively Labs, a division of Howell Laboratories, Inc. Bridgton, ME (207)647-3327

Figure 1B



WJYE BUFFALO, NY.

30665

July 25, 2013

_____H/VComposite RMS	0.633
……FCC Composite RMS	0.723

Frequency	96.1 / 432.45 mHz
Plot	Relative Field
Scale	4.5 : 1
	See Figure 2 for Mechanical Details

Antenna Model	6014-2/2-DA
Pattern Type	Directional H/V Composite

EXHIBIT -B-

Figure 1C

Tabulation of Horizontal Azimuth Pattern
WJYE BUFFALO, NY.

Azimuth	Rel Field	Azimuth	Rel Field
0	0.060	180	0.955
10	0.150	190	1.000
20	0.220	200	0.985
30	0.300	210	0.910
40	0.395	220	0.810
45	0.435	225	0.750
50	0.465	230	0.690
60	0.540	240	0.550
70	0.615	250	0.395
80	0.705	260	0.270
90	0.760	270	0.150
100	0.780	280	0.050
110	0.740	290	0.070
120	0.710	300	0.090
130	0.845	310	0.110
135	0.920	315	0.115
140	0.980	320	0.120
150	0.955	330	0.105
160	0.910	340	0.080
170	0.910	350	0.065

EXHIBIT -B-

Figure 1D

Tabulation of Vertical Azimuth Pattern
WJYE BUFFALO, NY.

Azimuth	Rel Field	Azimuth	Rel Field
0	0.140	180	0.730
10	0.230	190	0.835
20	0.340	200	0.905
30	0.440	210	0.940
40	0.505	220	0.870
45	0.530	225	0.815
50	0.550	230	0.750
60	0.580	240	0.550
70	0.605	250	0.360
80	0.645	260	0.220
90	0.670	270	0.080
100	0.675	280	0.055
110	0.610	290	0.075
120	0.645	300	0.100
130	0.890	310	0.120
135	0.950	315	0.130
140	0.985	320	0.135
150	0.965	330	0.135
160	0.855	340	0.100
170	0.745	350	0.060

EXHIBIT -B-

Figure 1E

Tabulation of Composite Azimuth Pattern
WJYE BUFFALO, NY.

Azimuth	Rel Field	Azimuth	Rel Field
0	0.140	180	0.955
10	0.230	190	1.000
20	0.340	200	0.985
30	0.440	210	0.940
40	0.505	220	0.870
45	0.530	225	0.815
50	0.550	230	0.750
60	0.580	240	0.550
70	0.615	250	0.395
80	0.705	260	0.270
90	0.760	270	0.150
100	0.780	280	0.055
110	0.740	290	0.075
120	0.710	300	0.100
130	0.890	310	0.120
135	0.950	315	0.130
140	0.985	320	0.135
150	0.965	330	0.135
160	0.910	340	0.100
170	0.910	350	0.065

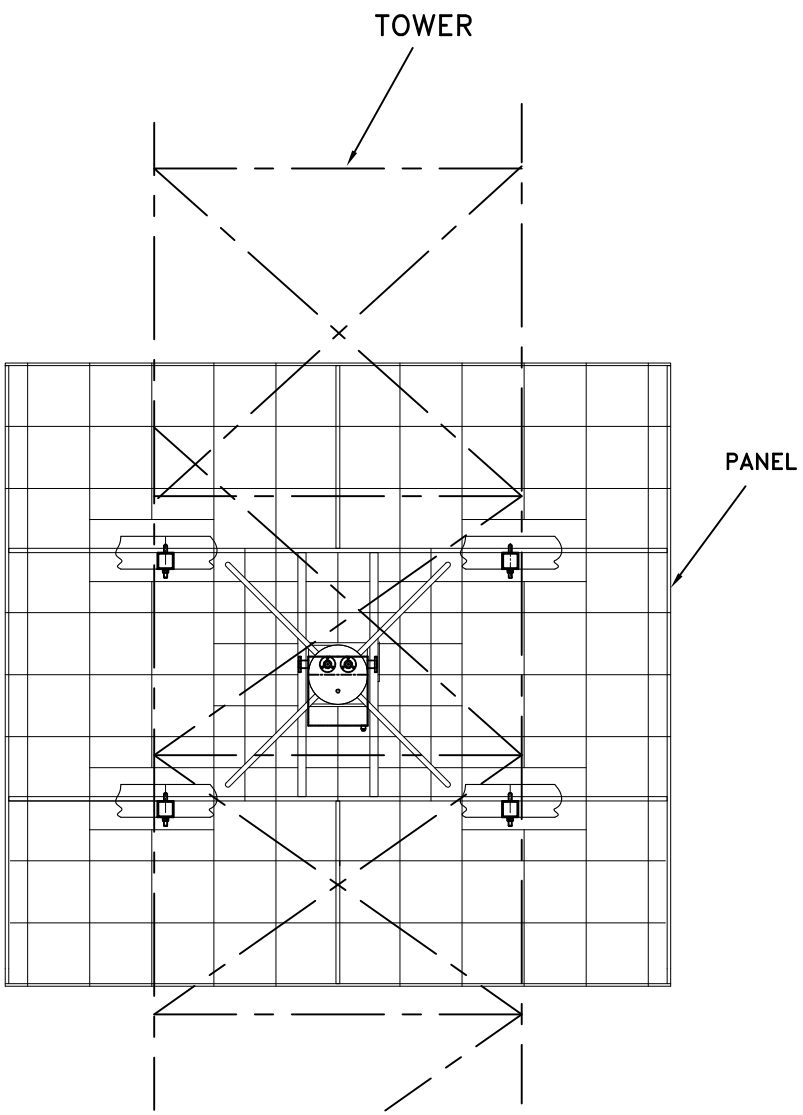
EXHIBIT -B-

Figure 1F

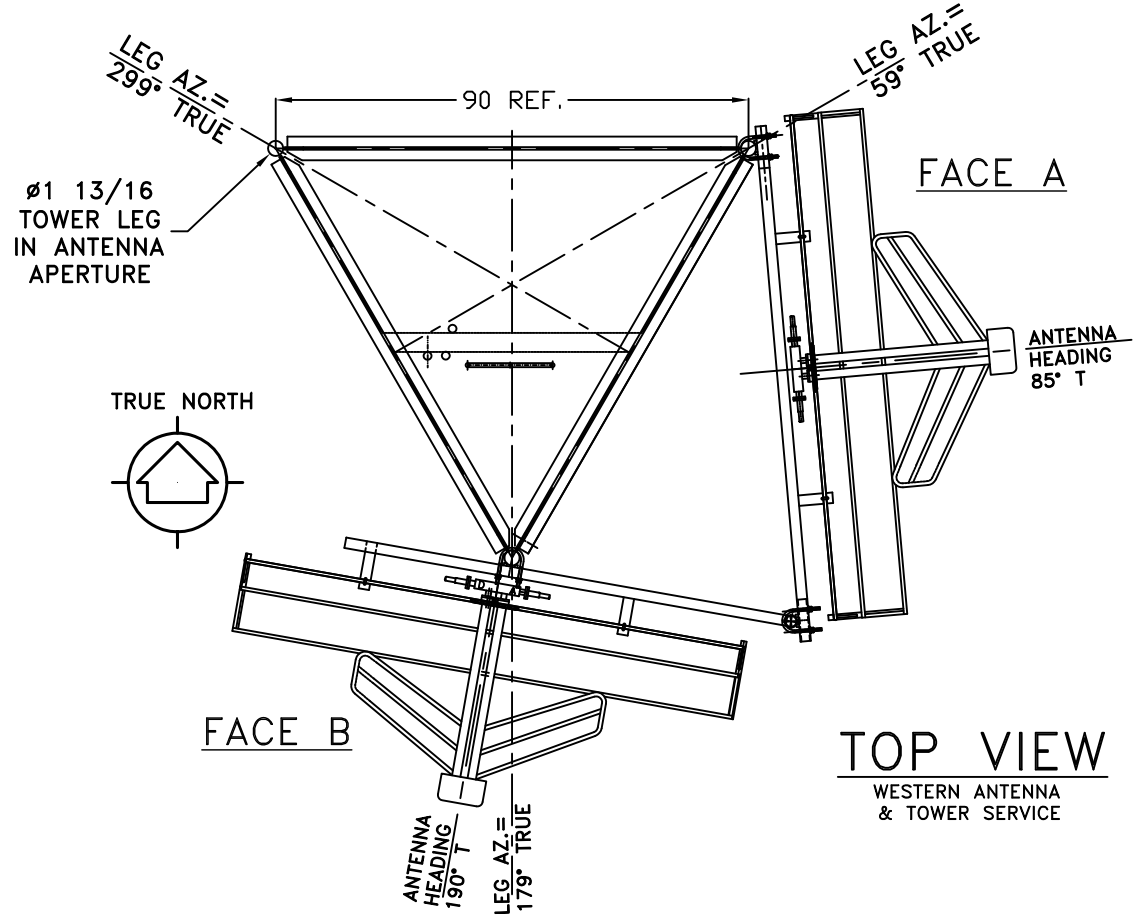
Tabulation of FCC Directional Composite
WJYE BUFFALO, NY.

Azimuth	Rel Field	Azimuth	Rel Field
0	0.449	180	1.000
10	0.520	190	1.000
20	0.575	200	1.000
30	0.598	210	1.000
40	0.599	220	1.000
50	0.603	230	0.832
60	0.611	240	0.596
70	0.633	250	0.419
80	0.780	260	0.299
90	0.923	270	0.209
100	1.000	280	0.100
110	1.000	290	0.100
120	1.000	300	0.125
130	1.000	310	0.150
140	1.000	320	0.179
150	1.000	330	0.226
160	1.000	340	0.284
170	1.000	350	0.357

EXHIBIT -B-



SIDE VIEW



TOP VIEW

WESTERN ANTENNA & TOWER SERVICE

FACE 'A' ANTENNA HEADING 85° T
FACE 'B' ANTENNA HEADING 190° T

SHIVELY LABS
A DIVISION OF HOWELL LABORATORIES INC.,BRIDGTON, MAINE

SHOP ORDER:	FREQUENCY:	SCALE:	DRAWN BY:
30665	96.1 MHz	N.T.S.	ASP
			APPROVED BY:

TITLE: MODEL-6014B-2/2-DIRECTIONAL ANTENNA

DATE: 4-4-13

FIGURE 2

EXHIBIT -B-

Antenna Mfg.:	**Shively Labs**			**Date: 7/25/2013**
Antenna Type:	**6014-2/2-DA**			
Station:	**WJYE**	**Beam Tilt**	**0**	
Frequency:	**96.1**	**Gain (Max)**	**2.744**	**4.384 dB**
Channel #:	**241**	**Gain (Horizon)**	**2.744**	**4.384 dB**
Figure:	**Figure 3**			

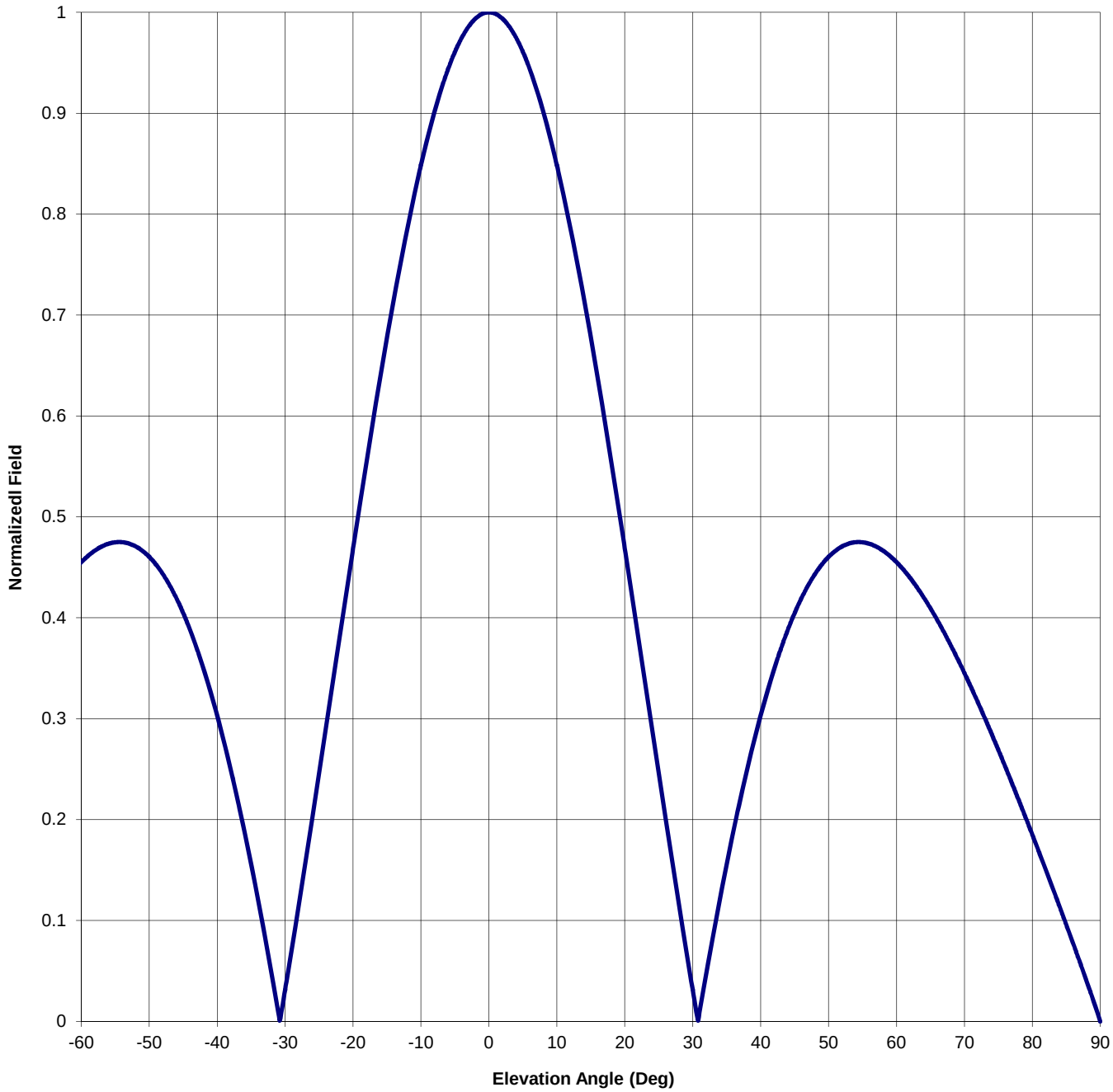


EXHIBIT -B-

Antenna Mfg.: Shively Labs
Antenna Type: 6014-2/2-DA
Station: WJYE
Frequency: 96.1
Channel #: 241
Figure: Figure 3

Beam Tilt 0
Gain (Max) 2.744 **4.384 dB**
Gain (Horizon) 2.744 **4.384 dB**

Date: 7/25/2013

Angle of Depression (Deg)	Relative Field	Angle of Depression (Deg)	Relative Field	Angle of Depression (Deg)	Relative Field	Angle of Depression (Deg)	Relative Field
-90	0.000	-44	0.388	0	1.000	46	0.419
-89	0.020	-43	0.370	1	0.998	47	0.432
-88	0.040	-42	0.349	2	0.994	48	0.443
-87	0.059	-41	0.327	3	0.986	49	0.453
-86	0.077	-40	0.303	4	0.975	50	0.460
-85	0.096	-39	0.277	5	0.961	51	0.466
-84	0.114	-38	0.249	6	0.944	52	0.471
-83	0.132	-37	0.220	7	0.924	53	0.474
-82	0.150	-36	0.189	8	0.902	54	0.475
-81	0.167	-35	0.156	9	0.876	55	0.475
-80	0.185	-34	0.121	10	0.849	56	0.473
-79	0.202	-33	0.085	11	0.819	57	0.471
-78	0.219	-32	0.048	12	0.786	58	0.467
-77	0.236	-31	0.009	13	0.752	59	0.461
-76	0.253	-30	0.031	14	0.716	60	0.455
-75	0.269	-29	0.073	15	0.678	61	0.448
-74	0.285	-28	0.115	16	0.638	62	0.440
-73	0.301	-27	0.158	17	0.597	63	0.430
-72	0.316	-26	0.202	18	0.555	64	0.420
-71	0.331	-25	0.246	19	0.513	65	0.409
-70	0.345	-24	0.290	20	0.469	66	0.398
-69	0.359	-23	0.335	21	0.425	67	0.386
-68	0.373	-22	0.380	22	0.380	68	0.373
-67	0.386	-21	0.425	23	0.335	69	0.359
-66	0.398	-20	0.469	24	0.290	70	0.345
-65	0.409	-19	0.513	25	0.246	71	0.331
-64	0.420	-18	0.555	26	0.202	72	0.316
-63	0.430	-17	0.597	27	0.158	73	0.301
-62	0.440	-16	0.638	28	0.115	74	0.285
-61	0.448	-15	0.678	29	0.073	75	0.269
-60	0.455	-14	0.716	30	0.031	76	0.253
-59	0.461	-13	0.752	31	0.009	77	0.236
-58	0.467	-12	0.786	32	0.048	78	0.219
-57	0.471	-11	0.819	33	0.085	79	0.202
-56	0.473	-10	0.849	34	0.121	80	0.185
-55	0.475	-9	0.876	35	0.156	81	0.167
-54	0.475	-8	0.902	36	0.189	82	0.150
-53	0.474	-7	0.924	37	0.220	83	0.132
-52	0.471	-6	0.944	38	0.249	84	0.114
-51	0.466	-5	0.961	39	0.277	85	0.096
-50	0.460	-4	0.975	40	0.303	86	0.077
-49	0.453	-3	0.986	41	0.327	87	0.059
-48	0.443	-2	0.994	42	0.349	88	0.040
-47	0.432	-1	0.998	43	0.370	89	0.020
-46	0.419	0	1.000	44	0.388	90	0.000
-45	0.405			45	0.405		

EXHIBIT -B-

S.O. 30665 Figure 4

VALIDATION OF TOTAL POWER GAIN CALCULATION

WJYE BUFFALO, NY.

MODEL 6014-2/2-DA

Elevation Gain of Antenna 0.998

Horizontal RMS value divided by the Vertical RMS value equals the Horiz. - Vert. Ratio

H RMS 0.615464 V RMS 0.590947 H/V Ratio 1.041

Elevation Gain of Horizontal Component 1.039

Elevation Gain of Vertical Component 0.958

Horizontal Azimuth Gain equals $1/(RMS)^2$. 2.640

Vertical Azimuth Gain equals $1/(RMS/Max\ Vert)^2$. 2.807

Max. Vertical 0.99

***Total Horizontal Power Gain is the Elevation Gain Times the Azimuth Gain**

Total Horizontal Power Gain = **2.744**

***Total Vertical Power Gain is the Elevation Gain Times the Azimuth Gain**

Total Vertical Power Gain = **2.689**

==========

ERP divided by Horizontal Power Gain equals Antenna Input Power

4.7 kW ERP Divided by H Gain 2.744 equals 1.713 kW H Antenna Input Power

Antenna Input Power times Vertical Power Gain equals Vertical ERP

1.713 kW Times V Gain 2.689 equals 4.606 kW V ERP

Maximum Value of the Vertical Component squared times the Maximum ERP equals the Vertical ERP

(0.99)^2 Times 4.70 Equals 4.606 kW Vertical ERP

NOTE: Calculating the ERP of the Vertical Component by two methods validates the total power gain calculations

EXHIBIT -C-

Nussbaumer & Clarke, Inc.
ENGINEERS AND SURVEYORS

3556 LAKE SHORE ROAD, SUITE 500, BUFFALO, NEW YORK 14219-1494
PHONE: (716) 827-8000 / FAX: (716) 826-7958
www.nussclarke.com

November 13, 2006

Site Name: WBUF(FM)
Buffalo, New York

FCC File Number: BPH-20030324ACV

This is to certify that the radiation centers of the two newly constructed antennae on the tower located at:

Latitude: 43°57'14" N+/- (NAD 83/96)
Longitude: 078°52'37" W+/- (NAD 83/96)

are aligned at the following headings:

Face A : 85° (+/- 2°) True North
Face B : 190° (+/- 2°) True North

and that the above information is true and correct to within the given specifications.

NUSSBAUMER AND CLARKE INC. INCORPORATED SEAL 1933 BUFFALO, N.Y.

Kevin P. Clough, R.L.S.
Nussbaumer & Clarke, Inc.
Corporate License No. 020

X:\05\05J2-0300\05J2-0390A-Azimuth Certification.doc

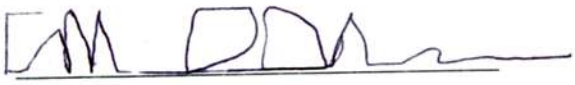
CBS RADIO
BROADCAST HD STREAMING ON-DEMAND
ESTABLISHED 1928

14 Lafayette Square
Suite 1200
Buffalo, NY 14203

EXHIBIT -D-

I, **William W. Stachowiak**, certify under penalty of perjury that the directional antenna referenced in the accompanying FCC Form 302-FM was installed under my direct supervision, and that the antenna was installed pursuant to the manufacturer's instructions.

I further state that I am a qualified and experienced radio engineer, having 15 years experience in the design, installation and maintenance of FM radio station transmission facilities. I hold an FCC General Class Radiotelephone License.



COUNTRY 106.5 WYRK
Phone: 716-852-7444
Fax: 716-852-5683

WJYE 96.1 Soft Rock Favorites
Phone: 716-856-3550
Fax: 716-852-0537

92.9 JACK FM playing what we want
Phone: 716-852-9292
Fax: 716-852-9290

WBLK 93.7 FM
Phone: 716-852-9393
Fax: 716-852-9390

CLASSIC COUNTRY 1230 am WECK
Phone: 716-856-3550
Fax: 716-852-0537