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PENN-JERSEY EDUCATIONAL RADIO CORPORATION

LICENSEE OF WDVR(FM)

CHANNEL 209

DELAWARE TOWNSHIP, NEW JERSEY

FCC Facility ID #52174

FCC FILE No. BPED-20070328ACP

APPLICATION FOR A COVERING LICENSE

FROM WDVR(FM)

ENGINEERING EXHIBIT 9 – SPECIAL CONDITIONS

March 25, 2008

***Directional Antenna System
for
WDVR, Delaware Township, New Jersey***

July 7, 2008

Electronics Research Inc. is providing a custom fabricated antenna system that is specially designed to meet the FCC requirements and the general needs of radio station WDVR.

The antenna is the ERI model P300-3BE-DA configuration. The vertically polarized system consists of 3 full-wavelength spaced bays using one driven vertical dipole per bay. The antenna was mounted on the North 320 degrees East tower leg with bracketry to provide an antenna orientation of North 298 degrees East. The antenna was tested on a 24" face ERI tower, which is the structure the station plans to use to support the array. All tests were performed on a frequency of 89.7 megahertz, which is the center of the FM broadcast channel assigned to WDVR.

Pattern measurements were made on a sixty-acre antenna pattern range that is owned and operated by Electronics Research, Inc. The tests were performed under the direction of Thomas B. Silliman, president of Electronics Research, Inc. Mr. Silliman has the Bachelor of Electrical Engineering and the Master of Electrical Engineering degrees from Cornell University and is a registered professional engineer in the states of Indiana, Maryland and Minnesota.



Directional Antenna System Proposed For WDVR, Delaware Township, New Jersey

(Continued)

DESCRIPTION OF THE TEST PROCEDURE

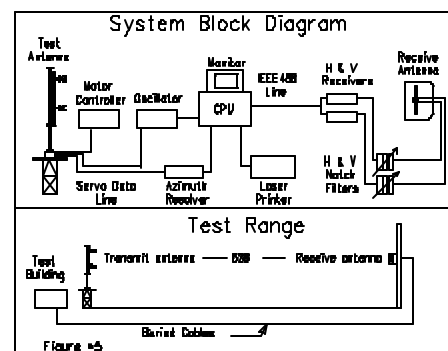
The test antenna consisted of a full-scale model of the complete vertically polarized system. The elements and brackets that were used in this test are electrically equivalent to those that will be supplied with the antenna. A section of 3 1/8 inch o.d. rigid coaxial line was used to feed the test antenna, and a section of 3 1/8 inch o.d. rigid outer conductor only was attached above the test antenna. The lines were properly grounded during all tests.

The power distribution and phase relationship to the antenna elements was adjusted in order to achieve the directional radiation patterns for the vertical polarization component.

The proof-of-performance was accomplished using a 24" face ERI tower with identical dimension and configuration including all braces, ladders, conduits, coaxial lines and other appurtenances that are included in the actual aperture at which the antenna will be installed. The structure was erected vertically on a turntable mounted on a non-metallic building with the antenna centered vertically on the structure, making the center of radiation of the test approximately 30 feet above ground. The turntable is equipped with a motor drive and a US Digital angle position indicator. The resolution of this angle position indicator is one-hundredth of a degree.

The antenna under test was operated in the transmitting mode and fed from a HP8657D signal generator. The frequency of the signal source was set at 89.7 MHz and was constantly monitored by a Rohde & Schwarz ESVD measuring receiver.

A broadband vertical dipole system, located approximately 628 from the test antenna, was used to receive the emitted test signals. The dipole system was mounted at the same height above terrain as the center of the antenna under test. The signals received by the dipole system were fed to the test building by way of a buried Heliax cable to a Rohde & Schwarz measuring receiver.



Directional Antenna System
Proposed For
WDVR, Delaware Township, New Jersey

(Continued)

This data was interfaced to a Hewlett-Packard Laser Jet 4P printer by means of a Pentium computer system. Relative field strength was plotted as a function of azimuth.

The measurements were performed by rotating the test antenna in a counter-clockwise direction and plotting the received signal on polar coordinated graph paper in a clockwise direction.

CONCLUSIONS

The vertically polarized system consists of 3 full-wavelength spaced bays using one driven vertical dipole per bay. The power distribution and phase relationship will be fixed when antenna is manufactured. Proper maintenance of the elements should be all that is required to maintain the pattern in adjustment.

The P300-3BE-DA array is to be mounted on the North 320 degrees East tower leg of the 24" face ERI tower at a bearing of North 298 degrees East. Blue prints provided with the antenna will show the proper antenna orientation alignment. The antenna alignment procedure should be directed by a licensed surveyor as prescribed by the FCC.

Figure #1 represents the measured relative field value of the vertical component relative to azimuth. A calculated vertical plane relative field pattern is shown on Figure #3 attached. The power in the maximum will reach 3.8 kilowatts (5.798 dBk).

The power at North 120 degrees East does not exceed 0.414 kilowatts (-3.83 dBk).

The power at North 130 degrees East does not exceed 0.439 kilowatts (-3.575 dBk).

The power at North 140 degrees East does not exceed 0.549 kilowatts (-2.604 dBk).

The power at North 200 degrees East does not exceed 2.94 kilowatts (4.683 dBk).

The power at North 330 degrees East does not exceed 2.87 kilowatts (4.579 dBk).

Directional Antenna System
Proposed For
WDVR, Delaware Township, New Jersey

(Continued)

The composite vertical maximum relative field pattern obtained from the measured data as shown on Figure #1 has an RMS that is greater than 85% of the filed composite pattern.

The clear vertical length of the structure required to support the antenna is 30 feet 11 in.

The directional antenna should not be mounted on the top of an antenna tower that includes a top-mounted platform larger than the cross-sectional area of the tower in the horizontal plane. No obstructions other than those that are specified by the blue prints supplied with the antenna are to be mounted within 75 ft. horizontally of the system. The vertical distance to the nearest obstruction should be a minimum of 10 ft. from the directional antenna. Metallic guy wires should be a minimum distance of forty feet horizontally from the antenna.

ELECTRONICS RESEARCH, INC.

A handwritten signature in black ink, appearing to read "Tom Scharf". The signature is fluid and cursive, with a large initial "T" and a stylized "S".

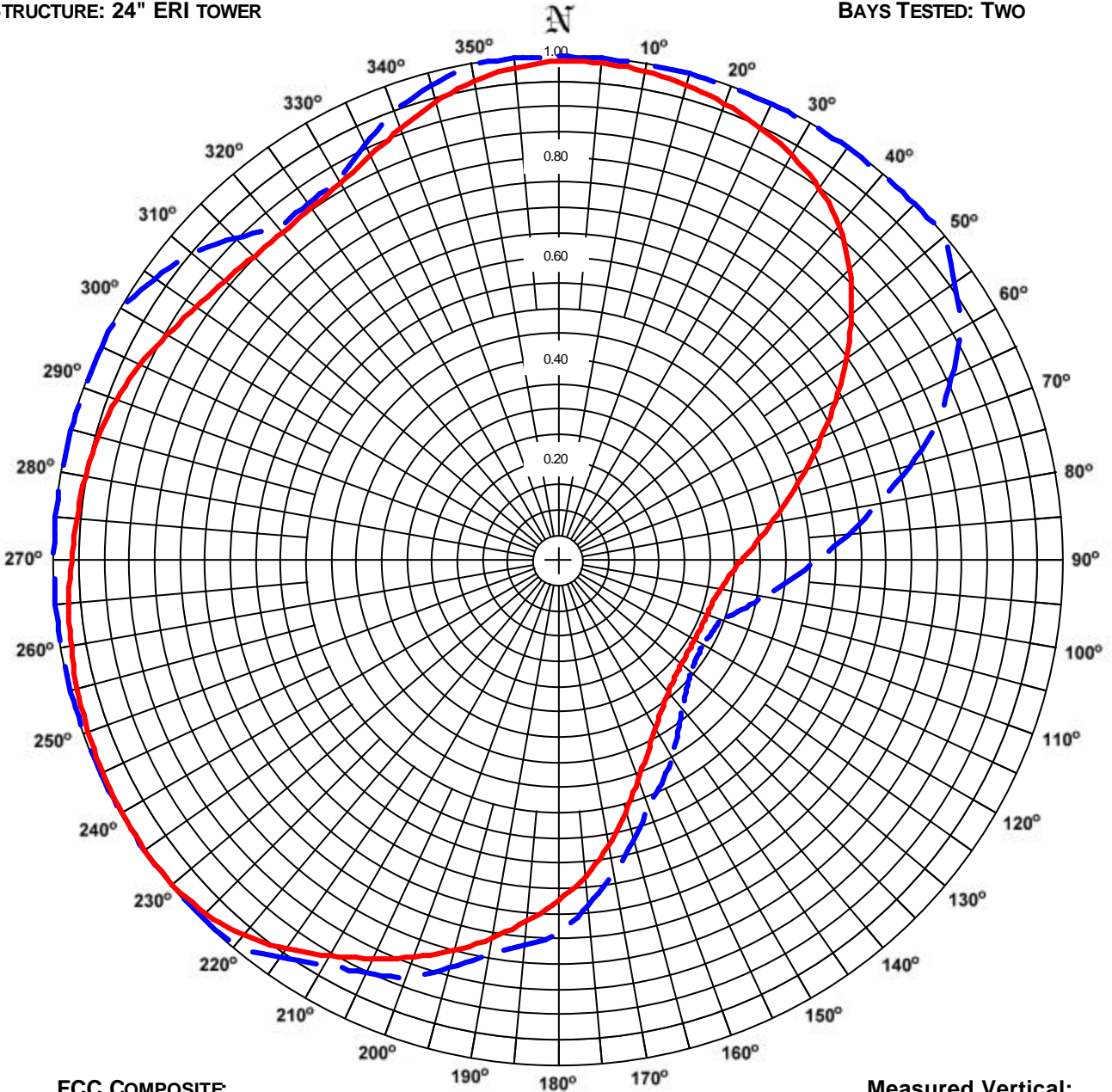
The Microsoft Word document on file electronically at Electronic Research, Inc. governs the specifications, scope, and configuration of the product described. All other representations whether verbal, printed, or electronic are subordinate to the master copy of this document on file at ERI.

ERI® *Horizontal Plane Relative Field Pattern*

Electronics Research, Inc. 7777 Gardner Rd. Chandler, In 47610 Phone (812) 925-6000 Fax (812) 925-4030 <http://www.eriinc.com/>

FIGURE NO: 1
STATION: WDVR
LOCATION: DELAWARE TOWNSHIP, NJ
ANTENNA: P300-3B-DA
STRUCTURE: 24" ERI TOWER

DATE: 7/7/08
FREQUENCY: 89.7 MHz
ORIENTATION: 298° TRUE
MOUNTING: STANDARD
BAYS TESTED: TWO



FCC COMPOSITE
RMS: 0.846
MAXIMUM: 1.000 @ 0° TRUE
MINIMUM: 0.330 @ 120° TRUE

Measured Vertical:
RMS: 0.785
Maximum: 1.000 @ 234° True
Minimum: 0.312 @ 117° True

COMMENTS: COMPOSITE PATTERN: THIS PATTERN SHOWS THE MAXIMUM OF EITHER THE H OR V AZIMUTH VALUES. THIS PATTERN IS GREATER THAN 85% OF THE FCC FILED COMPOSITE PATTERN BPED-20070328ACP

ERI® *Horizontal Plane Relative Field List*

Electronics Research, Inc. 7777 Gardner Rd. Chandler, In 47610 Phone (812) 925-6000 Fax (812) 925-4030 <http://www.eriinc.com/>

Station: WDVR

Location: Delaware Township, NJ

Frequency: 89.7 MHz

Antenna: P300-3B-DA

Orientation: 298° True

Tower: 24" ERI tower

Figure: 1

Date: 7/7/08

Reference: wdvr2m.fig

Angle	Pattern Data			Polarization	Angle	Pattern Data			Polarization
	Field	kW	dBk			Field	kW	dBk	
0°	0.992	3.74	5.73	Vertical	180°	0.673	1.72	2.36	Vertical
5°	0.991	3.73	5.72	Vertical	185°	0.717	1.95	2.91	Vertical
10°	0.986	3.70	5.68	Vertical	190°	0.760	2.19	3.41	Vertical
15°	0.978	3.63	5.60	Vertical	195°	0.799	2.42	3.84	Vertical
20°	0.965	3.54	5.49	Vertical	200°	0.836	2.65	4.24	Vertical
25°	0.948	3.42	5.34	Vertical	205°	0.870	2.87	4.58	Vertical
30°	0.928	3.27	5.15	Vertical	210°	0.904	3.10	4.92	Vertical
35°	0.902	3.09	4.91	Vertical	215°	0.939	3.35	5.25	Vertical
40°	0.866	2.85	4.55	Vertical	220°	0.968	3.56	5.52	Vertical
45°	0.817	2.54	4.04	Vertical	225°	0.988	3.71	5.70	Vertical
50°	0.759	2.19	3.40	Vertical	230°	0.998	3.79	5.78	Vertical
55°	0.696	1.84	2.65	Vertical	235°	1.000	3.80	5.80	Vertical
60°	0.634	1.53	1.84	Vertical	240°	0.998	3.79	5.78	Vertical
65°	0.574	1.25	0.98	Vertical	245°	0.995	3.76	5.76	Vertical
70°	0.519	1.03	0.11	Vertical	250°	0.991	3.73	5.72	Vertical
75°	0.471	0.84	-0.74	Vertical	255°	0.986	3.70	5.68	Vertical
80°	0.429	0.70	-1.56	Vertical	260°	0.980	3.65	5.62	Vertical
85°	0.392	0.59	-2.33	Vertical	265°	0.973	3.60	5.56	Vertical
90°	0.362	0.50	-3.02	Vertical	270°	0.965	3.54	5.49	Vertical
95°	0.341	0.44	-3.56	Vertical	275°	0.958	3.49	5.42	Vertical
100°	0.326	0.40	-3.93	Vertical	280°	0.952	3.45	5.37	Vertical
105°	0.317	0.38	-4.18	Vertical	285°	0.945	3.39	5.30	Vertical
110°	0.313	0.37	-4.29	Vertical	290°	0.932	3.30	5.19	Vertical
115°	0.312	0.37	-4.32	Vertical	295°	0.915	3.18	5.03	Vertical
120°	0.312	0.37	-4.32	Vertical	300°	0.895	3.05	4.84	Vertical
125°	0.314	0.37	-4.27	Vertical	305°	0.877	2.92	4.66	Vertical
130°	0.318	0.39	-4.14	Vertical	310°	0.863	2.83	4.52	Vertical
135°	0.326	0.41	-3.93	Vertical	315°	0.854	2.77	4.43	Vertical
140°	0.339	0.44	-3.59	Vertical	320°	0.851	2.75	4.39	Vertical
145°	0.359	0.49	-3.11	Vertical	325°	0.854	2.77	4.43	Vertical
150°	0.384	0.56	-2.51	Vertical	330°	0.865	2.85	4.54	Vertical
155°	0.419	0.67	-1.76	Vertical	335°	0.885	2.98	4.74	Vertical
160°	0.462	0.81	-0.91	Vertical	340°	0.912	3.16	5.00	Vertical
165°	0.516	1.01	0.05	Vertical	345°	0.941	3.37	5.27	Vertical
170°	0.574	1.25	0.97	Vertical	350°	0.965	3.54	5.49	Vertical
175°	0.626	1.49	1.73	Vertical	355°	0.982	3.66	5.64	Vertical

Polarization:

Vertical

Maximum Field:

1.000 @ 234° True

Minimum Field:

0.312 @ 117° True

RMS:

0.785

Maximum ERP:

3.800 kW

Maximum Power Gain:

5.050 (7.033 dB)

Total Input Power: 0.753 kW

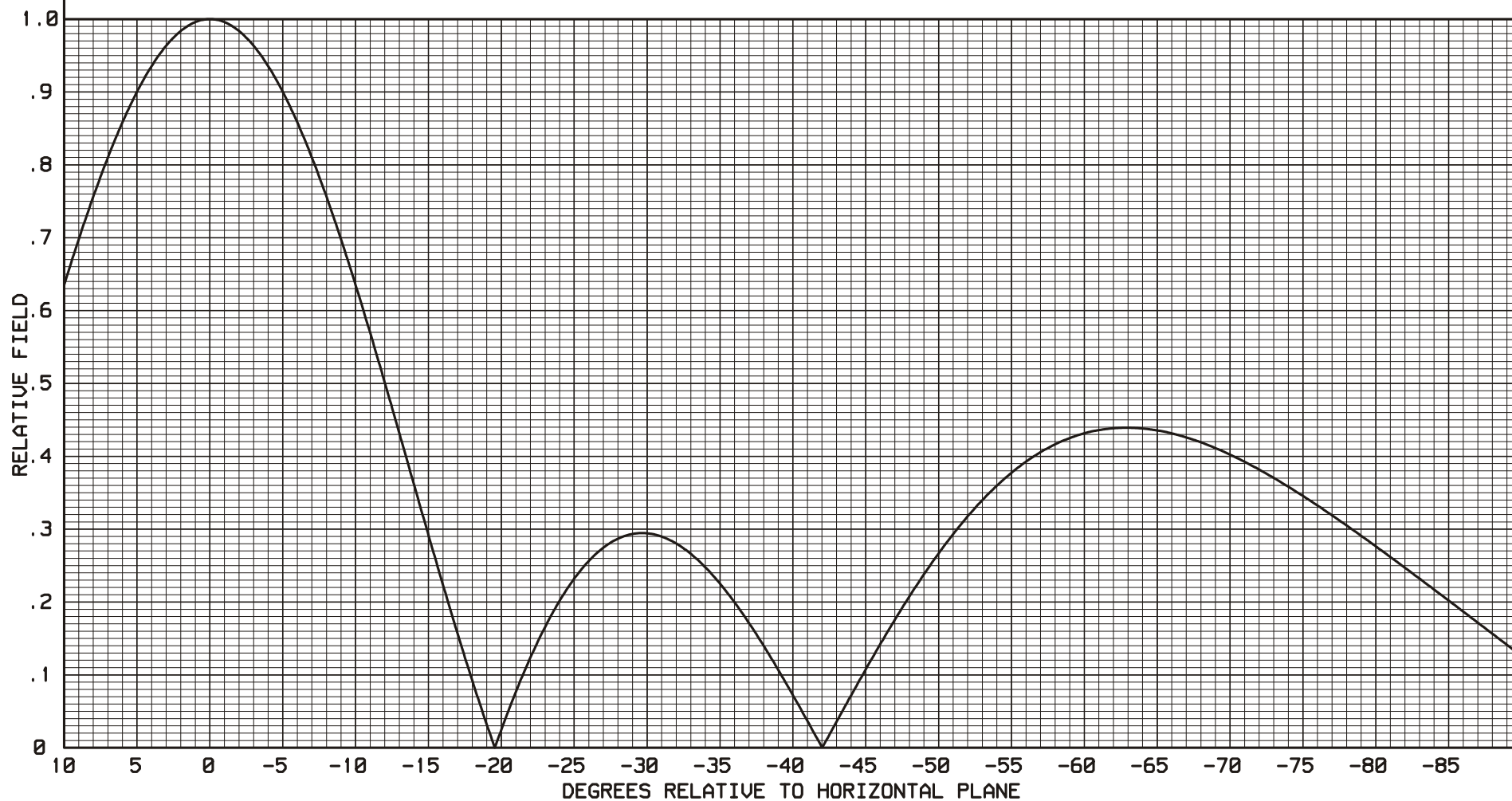
ELECTRONICS RESEARCH, INC.
7777 GARDNER ROAD
CHANDLER, IN. 47610

FIGURE 3

-----THEORETICAL-----
VERTICAL PLANE RELATIVE FIELD

ERI TYPE P300-3B-DA
VERTICALLY POLARIZED ANTENNA
0 DEGREE ELECTRICAL BEAM TILT
0 PERCENT NULL FILL

ELEMENT SPACING:
1.0 WAVELENGTH



Directional Antenna System for WDVR, Delaware Township, New Jersey

(Continued)

ANTENNA SPECIFICATIONS

Antenna Type:	P300-3BE-DA
Frequency:	89.7 MHZ
Number of Bays:	Three

MECHANICAL SPECIFICATIONS

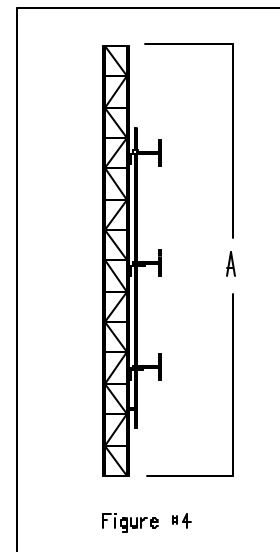
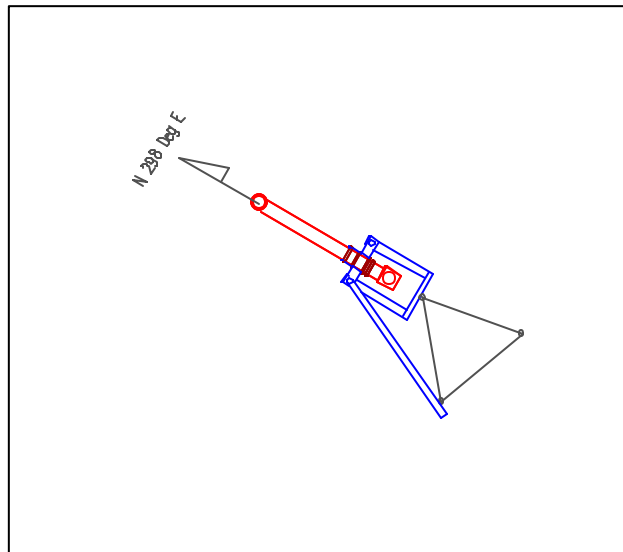
Mounting:	Standard
System length:	19 ft 7 in
Aperture length required:	30 ft 11 in
Orientation:	298° true

Input flange to the antenna 3 1/8" female.

ELECTRICAL SPECIFICATIONS

(For directional use)

Maximum vertical ERP:	3.8 kW (5.798 dBk)
Vertical maximum power gain:	5.050 (7.033 dB)
Total input power:	0.753 kW (-1.235 dBk)




Directional Antenna Installation Certification

In compliance with FCC Regulation 73.316(c)(2)(vii), this is to certify that the ERI model P300-3A-DA directional antenna for Radio Station WDVR operating at 89.7 Mhz and licensed to Delaware Township, has been erected according to design and installation instructions provided by Electronics Research, Incorporated (ERI) of Chandler, Indiana.

This document is separate from the licensed surveyor's certification of the antenna's orientation.

The installation was supervised by Mr. Steve Rhinerson, of ERI. I have been employed by ERI Since 2001, and served in the capacity of Installations Manager for the past seven (7) years. I have performed and supervised numerous installations.

Date: December 23, 2008

Signature: 

(Steve Rhinerson, Manager, Installations Division)



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Daniel A. Nagy, L.S. & P.P.
Samuel D. Costanzo, P.E. & P.P.

November 18, 2008

WDVR Radio
PO Box 191
Sergeantsville, NJ 08557

Attention: Frank W. Napurano

Reference: Block 15, Lot 8.05 - Radio Antenna Azimuth Certification
Kingwood Township, Hunterdon County, New Jersey

Dear Mr. Napurano:

I hereby declare that the heading of the antenna mounted on the radio tower on the Block 15, Lot 8.05, Kingwood Township, Hunterdon County, New Jersey for WDVR Radio has an azimuth of 298 degrees True North.

A handwritten signature in dark ink, appearing to read 'James D. McEwen', is written over a horizontal line.

James D. McEwen, Professional Land Surveyor
N.J. License No. GS-31659
Van Cleef Engineering Associates

F:\project\NewJersey\10-Hunterdon\16-Kingwood\0301KW_Documents\0301KW-081119-RadioAntennaAzimuthCertification.doc

Please Reply To:
WESTERN NEW JERSEY OFFICE • 1128 Route 31 • Lebanon, NJ 08833 • 908.735.9500 • Fax: 908.735-6364

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ENGINEERING REPORT COVERING
PARTIAL PROOF OF PERFORMANCE
ON BEHALF OF PENN-JERSEY EDUCATIONAL RADIO CORPORATION
FOR STATION WNJE(AM) 1040 KILOHERTZ
FLEMINGTON, NEW JERSEY

FEBRUARY 2009

ENGINEERING REPORT COVERING
PARTIAL PROOF OF PERFORMANCE
ON BEHALF OF PENN-JERSEY EDUCATIONAL RADIO CORPORATION
FOR STATION WNJE(AM) 1040 KILOHERTZ
FLEMINGTON, NEW JERSEY

SUMMARY

This engineering report is submitted on behalf of Penn-Jersey Educational Radio Corporation, ("Penn-Jersey") licensee of non-commercial FM station WDVR Delaware Township, New Jersey. The purpose of this report is to demonstrate compliance with special condition six of construction permit BPED-20070328ACP, which was issued to Penn Jersey for facilities improvements to WDVR. Special condition six requires before and after construction partial proofs of performance be performed on station WNJE Flemington, New Jersey (formerly identified as WCHR) to document that the WDVR construction has not adversely impacted WNJE's daytime, critical hours and nighttime directional antenna systems. In support thereof, provided in this report are summary tabulations of partial proof of performance field strength measurement data for the WNJE daytime, critical hours and nighttime directional antenna system. WNJE operates on 1040 kilohertz on an unlimited time basis with power of 15 kilowatts daytime, 7.5 kilowatts critical hours and 1.5 kilowatts nighttime.

METHODOLOGY

The partial proof of performance field strength measurements were conducted in accordance with FCC rules and regulations. The measurements were taken on pertinent pattern radials, including all monitored radials, determined from the most recent WNJE complete proof of performance dated January 2008. All data in this report is referenced to this proof. The before construction measurements were taken between June 2 through July 13, 2008. Upon completion of construction, the measurements were repeated in an identical manner from November 26 through November 30, 2008.

All proof measurements were conducted during the daytime hours by Charles J. Hecht, who is employed by this firm, and the undersigned, who directed all work. The measurement tabulations are provided in this report as Tables 1-12. The field strength meter employed for this project was a Potomac Instruments FIM-41, serial number 1051, last calibrated January 9, 2007.

CONCLUSION

Analysis of the partial proof field measurement data indicates that the WNJE monitor points continue to be within FCC maximum permitted values for all modes of operation. The analysis indicates field increases were observed on all of the measured radials, but these are attributable to the increased seasonal soil conductivity typically observed in New Jersey resulting from the colder weather that prevailed when the after measurements were recorded. The WDVR construction has not adversely affected WNJE.

DECLARATION

The foregoing was prepared by or under the immediate supervision of Charles A. Hecht of Charles A. Hecht & Associates, Inc., Pittstown, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. All statements herein are true and correct of his knowledge except such statements made on information and belief, and as to those statements, he believes them to be true and correct under the penalty of perjury.

Respectfully submitted,

Charles A. Hecht
Charles A. Hecht & Associates, Inc.
16 Doe Run
Pittstown, New Jersey 08867
(908) 730-7959
February 28, 2009

TABLE 1

FIELD STRENGTH MEASUREMENT ANALYSIS

15 KILOWATT DAYTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 35.5 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local</u> 6/4/2008	<u>Before mV/m</u>	<u>Date/Time Local</u> 11/26/2008	<u>After mV/m</u>	<u>Ratio Before/After</u>
6 MP*	1.98	1010	41.0	1000	49.0	1.195
9	2.30	1013	35.2	1014	40.0	1.136
13	3.85	1022	11.7	1022	13.7	1.171
14	5.65	1027	8.20	1027	10.0	1.220
15	5.83	1031	9.00	1032	10.6	1.178
16	7.88	1038	8.80	1039	10.9	1.239
17	9.58	1044	7.40	1044	9.70	1.311
18	10.99	1049	2.00	1050	2.25	1.125
19	12.08	1055	1.60	1054	2.65	1.656
Average Ratio						1.248

*FCC maximum permitted value is 60.2 mv/m.

TABLE 2

FIELD STRENGTH MEASUREMENT ANALYSIS

15 KILOWATT DAYTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 69 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 6/4/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/26/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
11	2.00	1120	29.3	1116	36.8	1.256
13 MP*	5.00	1127	7.65	1122	10.2	1.333
14	6.17	1132	5.05	1127	6.10	1.208
15	7.32	1136	6.20	1132	9.00	1.452
16	8.32	1141	2.70	1137	4.40	1.630
17	8.98	1148	2.20	1143	3.40	1.545
18	9.18	1151	2.40	1147	3.62	1.508
19	10.81	1157	1.90	1154	2.83	1.489
20	11.13	1200	1.95	1157	3.12	1.600
Average Ratio						1.447

*FCC maximum permitted value is 10.6 mv/m.

TABLE 3

FIELD STRENGTH MEASUREMENT ANALYSIS

15 KILOWATT DAYTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 102.5 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 6/4/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/26/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
7 MP*	1.97	1313	56.0	1258	61.8	1.104
11	4.06	1322	14.8	1306	16.1	1.088
12	5.63	1330	5.80	1313	7.00	1.207
13	6.18	1337	4.50	1320	7.70	1.711
14	6.66	1342	1.80	1325	2.55	1.417
16	7.55	1351	2.35	1332	3.45	1.468
17	9.24	1400	1.60	1339	1.55	0.969
18	10.33	1407	1.55	1346	2.15	1.387
19	12.32	1414	2.00	1356	2.62	1.310
Average Ratio						1.296

*FCC maximum permitted value is 65.3 mv/m.

TABLE 4

FIELD STRENGTH MEASUREMENT ANALYSIS

15 KILOWATT DAYTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 249 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 6/6/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/27/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
8 MP*	2.20	1130	160	1155	172	1.075
12	3.13	1135	145	1200	150	1.034
13	4.50	1140	51.0	1204	74.0	1.451
14	7.63	1148	15.8	1213	19.0	1.203
15	8.51	1159	14.0	1221	24.0	1.714
16	10.50	1207	8.00	1231	13.5	1.688
17	11.80	1214	8.70	1238	14.9	1.713
18	13.60	1221	6.60	1245	9.80	1.485
19	15.60	1229	5.70	1255	9.70	1.702
Average Ratio						1.452

*FCC maximum permitted value is 231.4 mv/m.

TABLE 5
FIELD STRENGTH MEASUREMENT ANALYSIS
7.5 KILOWATT CRITICAL HOURS PATTERN
WNJE 1040 KILOHERTZ
FLEMINGTON, NEW JERSEY
FEBRUARY 2009

RADIAL 42.5 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local</u> 6/27/2008	<u>Before mV/m</u>	<u>Date/Time Local</u> 11/29/2008	<u>After mV/m</u>	<u>Ratio Before/After</u>
11 MP*	2.23	1030	30.5	945	35.5	1.164
13	4.21	1035	10.0	950	12.0	1.200
14	6.12	1040	5.10	956	6.00	1.176
15	7.29	1048	3.30	1003	4.20	1.273
16	8.64	1054	3.20	1010	3.90	1.219
17	9.20	1101	3.65	1016	4.70	1.288
18	10.50	1108	2.52	1022	3.30	1.310
19	11.20	1113	1.35	1028	1.71	1.267
20	12.27	1119	1.69	1033	2.16	1.278
Average Ratio						1.242

*FCC maximum permitted value is 37.6 mv/m.

TABLE 6
FIELD STRENGTH MEASUREMENT ANALYSIS
7.5 KILOWATT CRITICAL HOURS PATTERN
WNJE 1040 KILOHERTZ
FLEMINGTON, NEW JERSEY
FEBRUARY 2009

RADIAL 69 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 6/27/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/29/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
11	2.00	1134	27.2	1046	34.0	1.250
13 MP*	5.00	1139	7.70	1051	10.5	1.364
14	6.17	1143	6.40	1054	8.90	1.391
15	7.32	1148	6.00	1059	7.70	1.283
16	8.32	1152	3.25	1104	4.15	1.277
17	8.98	1157	2.38	1108	3.40	1.429
18	9.18	1200	2.60	1111	3.60	1.385
19	10.81	1206	1.68	1117	2.30	1.369
20	11.13	1209	1.80	1120	2.55	1.417
Average Ratio						1.351

*FCC maximum permitted value is 12.5 mv/m.

TABLE 7
FIELD STRENGTH MEASUREMENT ANALYSIS
7.5 KILOWATT CRITICAL HOURS PATTERN
WNJE 1040 KILOHERTZ
FLEMINGTON, NEW JERSEY
FEBRUARY 2009

RADIAL 95 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local</u> 7/2/2008	<u>Before mV/m</u>	<u>Date/Time Local</u> 11/29/2008	<u>After mV/m</u>	<u>Ratio Before/After</u>
7 MP*	1.85	1300	45.0	1145	52.0	1.156
11	3.98	1305	22.0	1150	24.0	1.091
12	5.44	1308	7.90	1154	10.4	1.316
13	7.01	1312	6.70	1158	8.50	1.269
14	7.45	1316	4.65	1201	6.00	1.290
15	8.40	1319	4.44	1204	6.25	1.408
16	8.71	1323	4.20	1208	6.25	1.488
17	9.95	1329	3.85	1215	5.60	1.455
18	10.72	1338	2.25	1223	3.10	1.378
Average Ratio						1.317

*FCC maximum permitted value is 60.0 mv/m.

TABLE 8
FIELD STRENGTH MEASUREMENT ANALYSIS
7.5 KILOWATT CRITICAL HOURS PATTERN
WNJE 1040 KILOHERTZ
FLEMINGTON, NEW JERSEY
FEBRUARY 2009

RADIAL 249 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 7/13/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/29/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
8 MP*	2.20	1454	121	1240	138	1.140
12	3.13	1458	105	1244	117	1.114
13	4.50	1502	39.0	1247	47.0	1.205
14	7.63	1510	11.1	1255	16.5	1.486
15	8.51	1517	10.1	1303	13.0	1.287
16	10.50	1525	8.80	1310	10.0	1.136
17	11.80	1531	7.30	1317	7.7	1.055
18	13.60	1538	4.00	1323	6.40	1.600
19	15.60	1548	4.80	1331	5.90	1.229
Average Ratio						1.250

*FCC maximum permitted value is 164.5 mv/m.

TABLE 9

FIELD STRENGTH MEASUREMENT ANALYSIS

1.5 KILOWATT NIGHTTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 18 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 7/13/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/30/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
8	2.45	915	38.5	916	42.0	1.091
12	3.41	919	30.0	919	32.0	1.067
13	3.64	923	33.5	922	35.0	1.045
14	5.10	929	12.6	929	21.5	1.706
15	5.35	936	9.90	934	19.0	1.919
16	5.76	940	14.0	938	17.6	1.257
17	6.11	945	11.9	942	17.2	1.445
18	6.91	949	6.20	947	9.80	1.581
19	8.58	954	5.85	956	8.60	1.470
Average Ratio						1.398

TABLE 10

FIELD STRENGTH MEASUREMENT ANALYSIS

1.5 KILOWATT NIGHTTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 178 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 7/13/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/30/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
7	2.34	1011	96.0	1009	101.5	1.057
12	4.21	1017	34.0	1015	39.0	1.147
13	6.11	1024	13.5	1021	18.2	1.348
14	6.78	1030	17.0	1028	24.0	1.412
15	7.34	1038	15.1	1035	20.6	1.364
16	8.17	1044	6.10	1041	9.60	1.574
17	9.11	1052	8.65	1049	14.8	1.711
18	10.12	1059	6.00	1059	8.00	1.333
19	11.30	1104	3.30	1106	5.20	1.576
Average Ratio						1.391

TABLE 11

FIELD STRENGTH MEASUREMENT ANALYSIS

1.5 KILOWATT NIGHTTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 251.5 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local</u> 7/13/2008	<u>Before mV/m</u>	<u>Date/Time Local</u> 11/30/2008	<u>After mV/m</u>	<u>Ratio Before/After</u>
8 MP*	2.18	1124	8.80	1130	10.0	1.136
12	3.10	1128	7.21	1133	8.20	1.137
13	4.49	1134	2.92	1140	3.40	1.164
14	7.49	1141	0.81	1148	1.00	1.235
15	8.36	1152	0.64	1157	0.77	1.203
16	8.93	1156	0.19	1200	0.22	1.142
17	10.10	1200	0.60	1205	0.84	1.400
18	11.90	1209	0.33	1214	0.54	1.636
19	13.80	1218	0.23	1224	0.39	1.696
Average Ratio						1.306

*FCC maximum permitted value is 13.7 mv/m.

TABLE 12

FIELD STRENGTH MEASUREMENT ANALYSIS

1.5 KILOWATT NIGHTTIME PATTERN

WNJE 1040 KILOHERTZ

FLEMINGTON, NEW JERSEY

FEBRUARY 2009

RADIAL 289 DEGREES TRUE

<u>Point Number</u>	<u>Distance Km</u>	<u>Date/Time Local 7/13/2008</u>	<u>Before mV/m</u>	<u>Date/Time Local 11/30/2008</u>	<u>After mV/m</u>	<u>Ratio Before/After</u>
13 MP*	2.85	1332	7.65	1344	8.29	1.084
14	6.00	1340	1.33	1341	1.48	1.113
15	6.87	1345	1.61	1345	2.22	1.379
16	7.04	1348	1.08	1349	2.00	1.852
17	7.20	1351	1.87	1353	2.47	1.321
18	7.53	1355	1.49	1356	2.45	1.644
19	7.72	1400	1.60	1400	1.90	1.188
20	8.14	1404	0.96	1406	1.30	1.354
21	9.35	1412	0.99	1415	1.60	1.616
Average Ratio						1.394

*FCC maximum permitted value is 8.54 mv/m.