

On April 3, 2007, the Audio Division granted a minor change application (FCC File No. BPFT-20061213AED) which permitted W244AS to increase power and change from its licensed 8 watt ERP nondirectional operation to a 23 watt ERP (DA-MAX) directional operation from its existing transmitter site. The W244AS power increase was authorized because the proposed change from a one-bay nondirectional antenna to a four-bay, half-wavelength spaced, directional antenna would reduce existing second-adjacent channel interference to the extent that any interference caused would occur well above ground level, well above any occupied building and would affect no population.

Recently, the locality denied use of the authorized 4-bay antenna, but did allow for the use of a 2-bay antenna. Also, it has been determined that the existing W244AS support structure, owned by Crown Atlantic Company, LLC, and registered with the FCC under Antenna Structure Registration (ASR) number 1229443, is registered at the incorrect geographical coordinates. Therefore, this application seeks to modify the outstanding W244AS construction permit to correct the coordinates and proposes use of 2-bay full wave spaced nondirectional antenna in lieu of the authorized 4-bay directional antenna.

Because the interference 'footprint' of the 2-bay nondirectional antenna is different than that from the authorized 4-bay, half-wave, directional facility, this application also requests a decrease in power back to the licensed ERP of 8 watts (nondirectional). Therefore, this application proposes to maintain the licensed ERP of 8 watts, correct coordinates and change from a 1-bay transmitting antenna to a 2-bay transmitting antenna. As demonstrated herein, the proposed antenna and power combination will: (1) maintain the licensed 98 dBu second-adjacent channel interfering contour, (2) eliminate some interference caused by the licensed 1-bay antenna and (3) cause no new second-adjacent channel interference to potential listeners of WQHT(FM) and WQXR-FM.

#### W244AS Section 74.1204 Contour Overlap

The existing W244AS transmitter site is located within the protected contour of second-adjacent channel, full service stations WQHT(FM), New York, NY (Channel 246B) and WQXR-FM, New York, NY (Channel 242B). Consequently, the W244AS interfering contour is located with the WQHT and the WQXR-FM protected contour resulting in contour overlap as defined in Section 74.1204 of the FCC Rules. Neither the present nor the proposed W244AS facility causes overlap to any other authorized or proposed facility.

At the W244AS transmitter site, both WQHT and WQXR-FM produce an F(50,50) signal strength of 58 dBu. Therefore, in the vicinity of the second-adjacent channel translator station, the relevant W244AS interfering contour is the 98 dBu F(50,10) contour.

### W244AS Present Area of Predicted Interference Caused

W244AS currently operates with a maximum Effective Radiated Power of 8 watts from an ERI, 1-bay, non-directional antenna. As shown in Exhibit 1, considering the presently licensed W244AS, 1-bay, 8 watt facility, the predicted interference presently caused by W244AS to both WQHT and WQXR-FM is within a “donut” shaped area – and occurs within *30 feet of ground level* between 12 meters (40 feet) from the W244AS tower to 223 meters (730 feet) from the W244S tower.<sup>1</sup> This area, subject to interference from the W244AS licensed facility, is shown on Exhibit 3 and labeled “Area 1”.

### W244AS Proposed Area of Predicted Interference Caused

The Applicant proposes to maintain its licensed ERP of 8 watts. However, the Applicant proposes to use an ERI, 2-bay, full-wavelength spaced, nondirectional antenna, in lieu of the licensed ERI 1-bay nondirectional antenna. As shown in Exhibit 2, considering the proposed W244AS, 2-bay, 8 watt facility, the predicted interference presently caused by W244AS to both WQHT and WQXR-FM is within a “donut” shaped area – and occurs within *30 feet of ground level* between 12 meters (40 feet) from the W244AS tower to 78 meters (257 feet) from the W244S tower.

Because the W244AS licensed 1-bay facility causes predicted second-adjacent channel interference within 30 feet of ground level to a horizontal distance of 730 feet from the W244AS tower and the proposed 2-bay facility causes predicted second-adjacent channel interference only to a horizontal distance of 257 feet from the W244AS tower, the instant proposal will eliminate interference in the area between 257 feet and 730 feet from the W244AS tower. In this area, labeled Area #2 on Exhibit 3, all predicted second adjacent channel interference caused will occur at heights above any buildings and will affect no population.

Also depicted on Exhibit 3 is a circle with a radius of 249 meters (817 feet) which represents both the present and the proposed 98 dBu second-adjacent channel interfering contour. In the area between 730 and 817 horizontal feet of the W244AS tower there are a few more buildings and structures. In this area second-adjacent channel interference is predicted to occur at heights over 100 feet AGL. There are no buildings or dwellings or occupied space in this zone that approach this height.

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<sup>1</sup> The Audio Division routinely permits use of an antenna’s vertical plane radiation characteristics to demonstrate lack of interference. See W288BS, Reston, VA (BNPFT-20030828BBZ, granted 11/24/2004); W237CS, Bradford, PA (BNPFT-20030826AIW, granted 11/01/2004); and W292DJ, Lake Bluff, IL (BNPFT-20030826AHL, granted 10/27/2004). The W244AS vertical radiation patterns are attached, on the antenna manufacturer’s letterhead, for the licensed one-bay, full-wavelength spaced antenna and the proposed two-bay, full-wavelength spaced antenna.

In light of the above, it is submitted that no new interference is predicted to occur as a result of the instant proposal to WQXR-FM or WQHT(FM). Accordingly, the proposed W244AS facility satisfies Section 74.1204(d) of the FCC Rules because it has been “demonstrated that no actual interference will occur due to lack of population or such other factors as may be applicable”.

Further, because the proposed W244AS technical facility will result in either the elimination of predicted interference to nearby receivers or a substantial reduction in interference in comparison to the present W244AS technical facility, the instant proposal may also be granted under Section 74.1204(c) of the FCC Rules.

#### W244AS Coordinate Correction and FCC ASR Discrepancy

The instant application proposes no physical change in the W244AS antenna site. The W244AS facility is licensed at 40-14-20 N.L. and 74-02-45 W.L. (NAD-27). The actual geographical coordinates of the W244AS support structure are 40-14-20 N.L. and 74-02-40 W.L. (NAD-27). The instant application specifies the corrected coordinates herein in an effort to correct the W244AS authorization.

With respect to the proposed correction in coordinates, the Applicant recognizes that the FCC ASR data does not match the tower location specified on the associated FCC Form 349, Section III-A, Question 4. Unfortunately, because the Applicant is simply a tenant on the existing tower, the Applicant cannot cause the required FAA and FCC ASR filings to formally correct the FCC ASR record for the existing tower. Only Crown Atlantic Company, LLC, the tower owner, may pursue the required filings and the required correction.

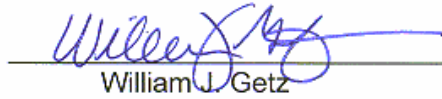
#### Requested FCC Action and Request for Special Temporary Authority

It should be emphasized that W244AS is presently licensed to operate from its current tower site with a nondirectional ERP of 8 watts. However, considering the coordinate discrepancy in the FCC’s ASR database, W244AS is actually operating from a site approximately 370 feet away. Accordingly, concurrently with the filing of the instant application the Applicant will request Special Temporary Authority (STA) to operate with the technical facility requested herein. The technical facility requested herein represents the actual W244AS tower site and the presently licensed ERP of 8 watts. Grant of the STA will allow W244AS to operate with a technically correct authorization during the time it takes the tower owner to correct its longstanding error in the location of the W244AS support structure.

Obviously, grant of the instant application will moot the need for STA because the resulting construction permit would provide W244AS with a technically correct

authorization. However, in the event the instant application cannot be granted due to the coordinate discrepancy discussed above, the Applicant respectfully requests that this application be held in pending status until such a time that the tower owner corrects the tower coordinate discrepancy and modifies the existing tower's FCC ASR data.

Dated: June 10, 2009

  
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William J. Getz

**W244AS Oakhurst, NJ**  
**Present 8 Watts ERP**

Maximum ERP      Interfering contour value ----->      98      dBu  
 0.008      kW      RCAGL (m)----->      77      meters  
                                  Antenna Type ----->      1

Antenna Type      1      =      ERI, 1-bay, full-wave spaced

Angle Below Horizontal (degrees)	Vertical Pattern**** (REL. FIELD)	W244AS ERP (kW)	W244AS ERP (dBk)	Proposed Free-Space Distance to 98 dBu interfering contour (meters)	Slant Distance (meters) *	Height of 98 dBu interfering contour above ground (feet)**	Proposed Interference within 30 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.0080	-20.969	249.2	N/A	252.6			
5	0.998	0.0080	-20.986	248.7	779.1	181.5	No	247.8	812.8
10	0.987	0.0078	-21.083	246.0	391.0	112.5	No	242.2	794.7
15	0.970	0.0075	-21.234	241.7	262.3	47.4	No	233.5	766.0
20	0.950	0.0072	-21.415	236.7	198.5	-13.0	Yes	222.5	729.9
25	0.920	0.0068	-21.693	229.3	160.7	-65.3	Yes	207.8	681.7
30	0.885	0.0063	-22.030	220.5	135.8	-109.2	Yes	191.0	626.6
35	0.842	0.0057	-22.463	209.8	118.4	-142.2	Yes	171.9	563.9
40	0.800	0.0051	-22.907	199.4	105.6	-167.8	Yes	152.7	501.0
45	0.745	0.0044	-23.526	185.7	96.0	-178.1	Yes	131.3	430.7
50	0.690	0.0038	-24.192	171.9	88.6	-179.5	Yes	110.5	362.6
55	0.630	0.0032	-24.982	157.0	82.9	-169.3	Yes	90.0	295.4
60	0.565	0.0026	-25.928	140.8	78.4	-147.4	Yes	70.4	231.0
65	0.498	0.0020	-27.025	124.1	74.9	-116.4	Yes	52.4	172.1
70	0.428	0.0015	-28.340	106.7	72.3	-76.2	Yes	36.5	119.7
75	0.355	0.0010	-29.965	88.5	70.3	-27.7	Yes	22.9	75.1
80	0.280	0.0006	-32.026	69.8	68.9	27.2	Yes	12.1	39.8
85	0.205	0.0003	-34.734	51.1	68.2	85.7	No	4.5	14.6
90	0.130	0.0001	-38.690	32.4	67.9	146.3	No	0.0	0.0

\* Slant distance from antenna center of radiation to location 30 feet (9.1 meters) above ground level at angle below horizontal.

\*\* A negative number indicates that the interfering contour is predicted to reach ground level. If a negative number is present, the interfering contour reaches ground level at the "Horizontal Distance" described below.

\*\*\* Horizontal distance from tower base to interfering contour at the indicated height above ground level. If a negative height above ground level is indicated, this horizontal distance is the distance from the tower base to the interfering contour. This horizontal distance is only relevant if the proposed interference is predicted to occur within 30 feet of ground level.

\*\*\* The manufacturer's vertical plane radiation pattern is attached.

**W244AS Oakhurst, NJ**  
**Proposed 8 Watts ERP**

Maximum ERP      Interfering contour value ----->      98      dBu  
 0.008      kW      RCAGL (m)----->      77      meters  
                          Antenna Type ----->      2

Antenna Type      2      =      ERI, 2-bay, full-wave spaced

Angle Below Horizontal (degrees)	Vertical Pattern**** (REL. FIELD)	W244AS ERP (kW)	W244AS ERP (dBk)	Proposed Free-Space Distance to 98 dBu interfering contour (meters)	Slant Distance (meters) *	Height of 98 dBu interfering contour above ground (feet)**	Proposed Interference within 30 ' of ground level?	Horizontal Distance (meters) ***	Horizontal Distance (feet) ***
0	1.000	0.0080	-20.969	249.2	N/A	252.6			
5	0.960	0.0074	-21.324	239.2	779.1	184.2	No	238.3	781.9
10	0.848	0.0058	-22.401	211.3	391.0	132.2	No	208.1	682.8
15	0.672	0.0036	-24.422	167.5	262.3	110.4	No	161.8	530.7
20	0.455	0.0017	-27.809	113.4	198.5	125.4	No	106.5	349.6
25	0.225	0.0004	-33.925	56.1	160.7	174.9	No	50.8	166.7
30	0.000	0.0000	-120.969	0.0	135.8	252.6	No	0.0	0.0
35	0.188	0.0003	-35.486	46.8	118.4	164.5	No	38.4	125.9
40	0.340	0.0009	-30.340	84.7	105.6	73.9	No	64.9	212.9
45	0.445	0.0016	-28.002	110.9	96.0	-4.6	Yes	78.4	257.3
50	0.518	0.0021	-26.683	129.1	88.6	-71.8	Yes	83.0	272.2
55	0.528	0.0022	-26.516	131.6	82.9	-101.0	Yes	75.5	247.6
60	0.512	0.0021	-26.784	127.6	78.4	-109.9	Yes	63.8	209.3
65	0.472	0.0018	-27.490	117.6	74.9	-97.1	Yes	49.7	163.1
70	0.417	0.0014	-28.566	103.9	72.3	-67.7	Yes	35.5	116.6
75	0.350	0.0010	-30.088	87.2	70.3	-23.8	Yes	22.6	74.1
80	0.280	0.0006	-32.026	69.8	68.9	27.2	Yes	12.1	39.8
85	0.200	0.0003	-34.949	49.8	68.2	89.7	No	4.3	14.3
90	0.130	0.0001	-38.690	32.4	67.9	146.3	No	0.0	0.0

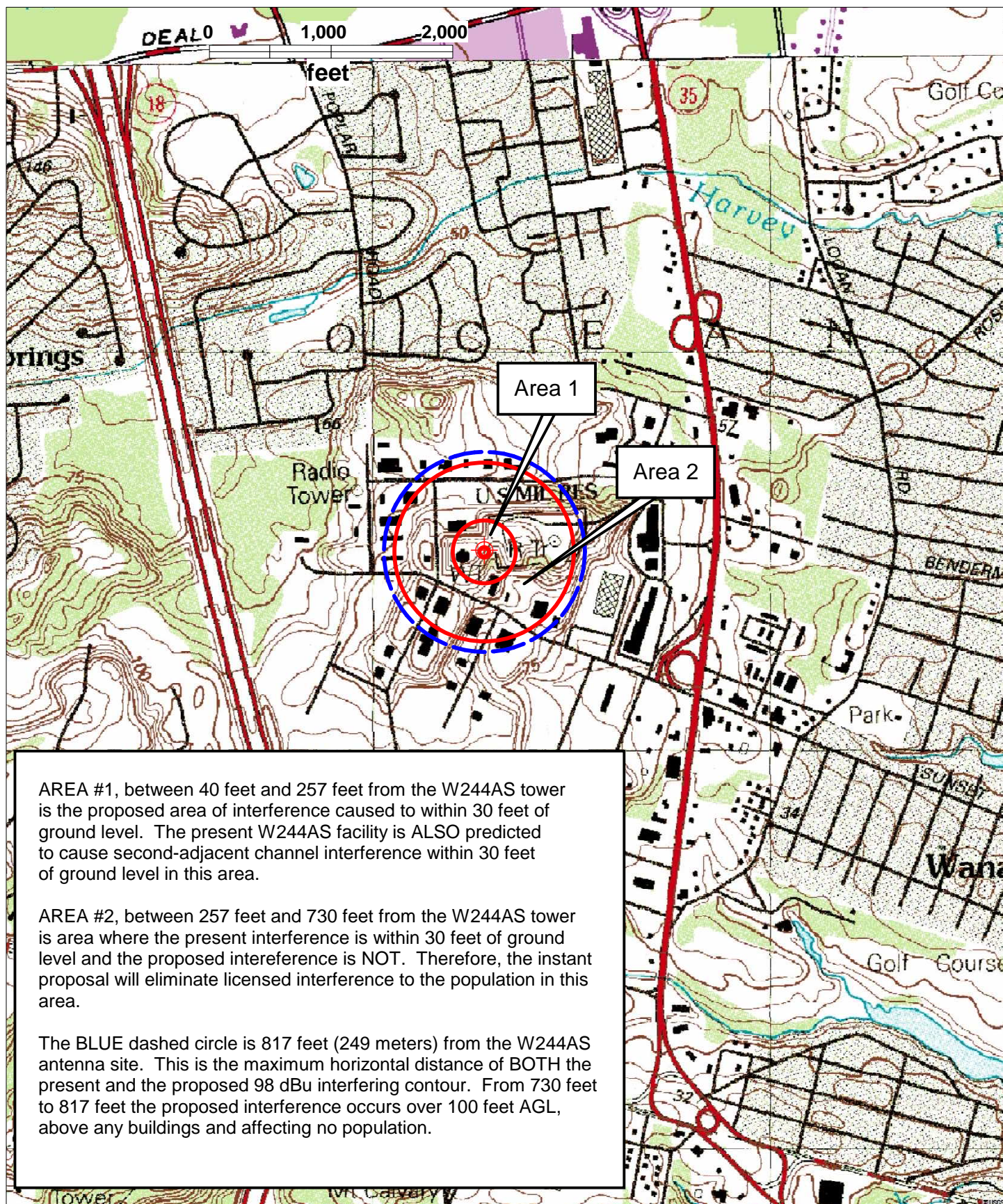
\* Slant distance from antenna center of radiation to location 30 feet (9.1 meters) above ground level at angle below horizontal.

\*\* A negative number indicates that the interfering contour is predicted to reach ground level. If a negative number is present, the interfering contour reaches ground level at the "Horizontal Distance" described below.

\*\*\* Horizontal distance from tower base to interfering contour at the indicated height above ground level. If a negative height above ground level is indicated, this horizontal distance is the distance from the tower base to the interfering contour. This horizontal distance is only relevant if the proposed interference is predicted to occur within 30 feet of ground level.

\*\*\* The manufacturer's vertical plane radiation pattern is attached.





W244AS, OAKHURST, NEW JERSEY  
 PREDICTED INTERFERENCE MAP  
 PRESENT ONE-BAY ANTENNA VS.  
 PROPOSED TWO-BAY ANTENNA  
 ERP = 8 WATTS, RCAGL = 77 meters





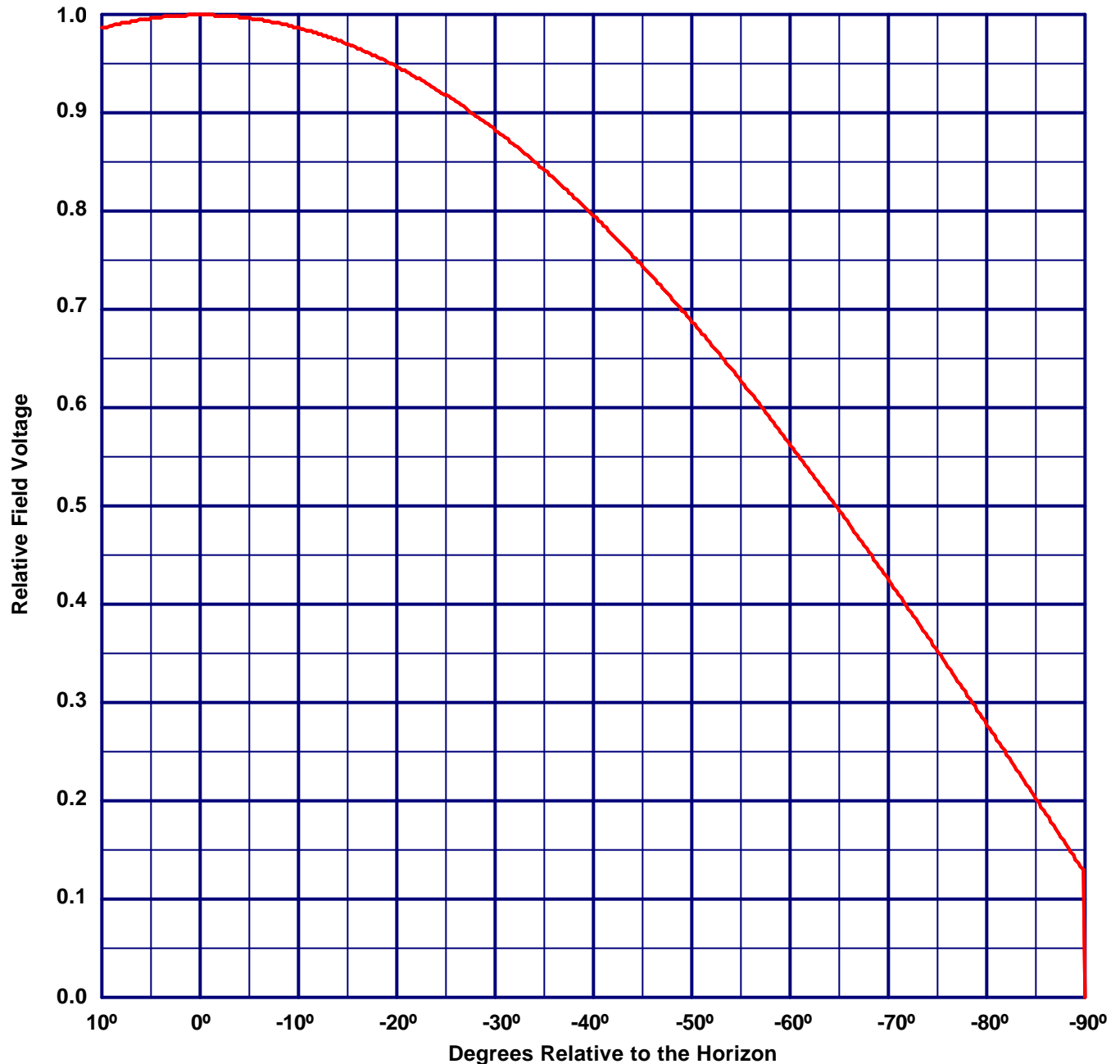
## Vertical Plane Relative Field Pattern

W244AS, Oakhurst, NJ, 96.7 MHz

Figure#: 3

Date: 2/1/2007

*A 1 level, 1 wave-length spaced LPX-1E non directional antenna  
with 0° beam tilt, 0% null fill and a H/V maximum power ratio of 1.000*



**Vertical Polarization Gain:**

Maximum: 0.461 (-3.362 dB)

Horizontal Plane: 0.461 (-3.362 dB)

**Horizontal Polarization Gain:**

Maximum: 0.461 (-3.362 dB)

Horizontal Plane: 0.461 (-3.362 dB)



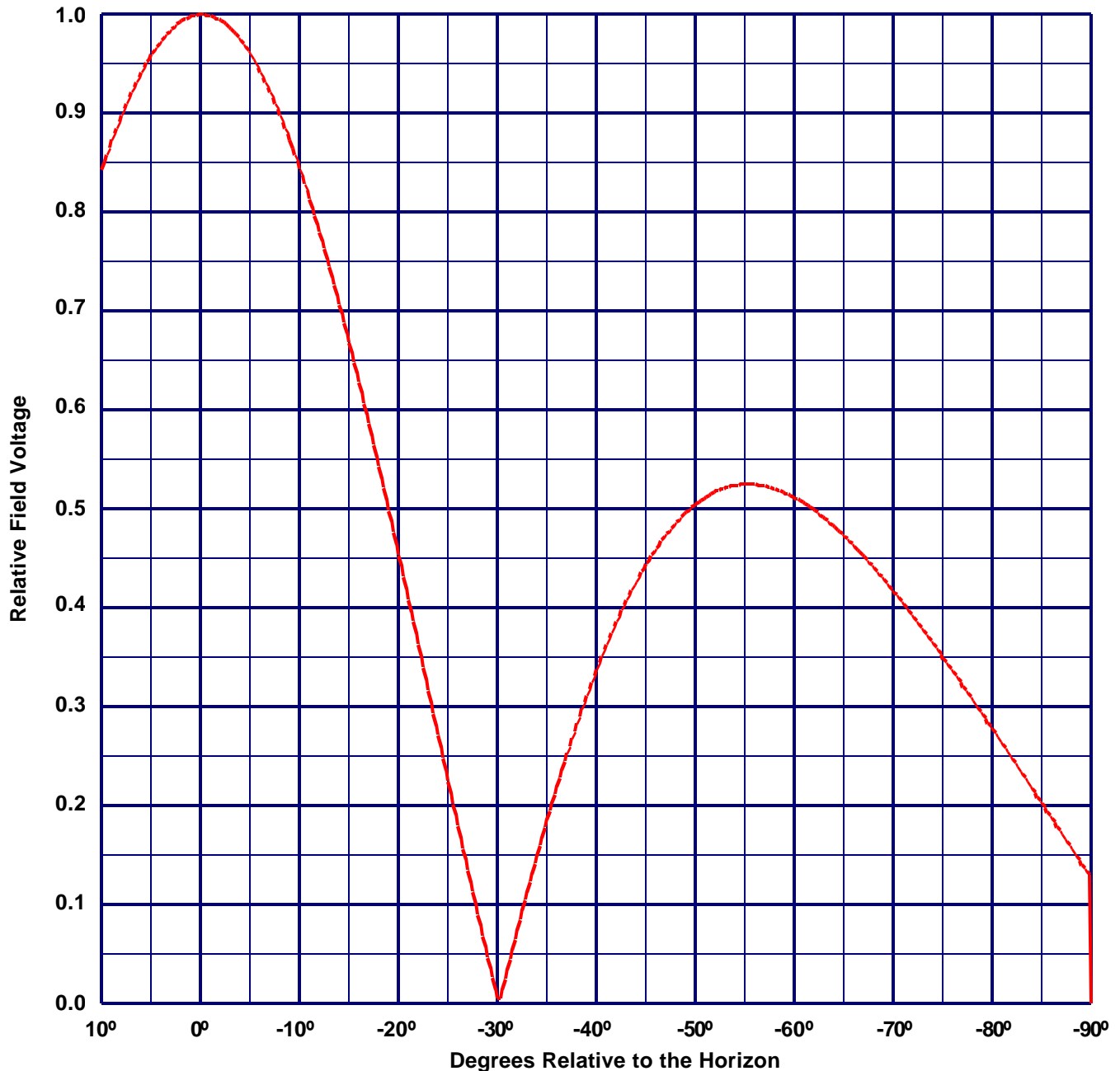


# Vertical Plane Relative Field Pattern

**ERI TYPE SHP, SHPX, MP, MPX, LP OR LPX ELEMENTS**

**A 2 level, 1 wave-length spaced non directional antenna**

**with 0° beam tilt, 0% null fill and a H/V maximum power ratio of 1.000**



**Vertical Polarization Gain:**

**Maximum: 0.997 (-0.013 dB)**

**Horizontal Plane: 0.997 (-0.013 dB)**

**Horizontal Polarization Gain:**

**Maximum: 0.997 (-0.013 dB)**

**Horizontal Plane: 0.997 (-0.013 dB)**