EXHIBIT E

ENGINEERING STATEMENT
RE MINOR MODIFICATION TO DTV
CONSTRUCTION PERMIT BMPCDT-20020221AAC
ON BEHALF OF
WBBH-DT, FORT MYERS, FLORIDA
CHANNEL 15 1000 KW MAX ERP 453.9 METERS HAAT

APRIL 2003

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

Introduction

This engineering statement has been prepared on behalf of Waterman Broadcasting Corporation of Florida, licensee of TV WBBH-TV of Fort Myers, Florida, in support of its request for a minor change in its DTV construction permit. At present, WBBH-TV operates on NTSC TV Channel 20(+) (506-512 MHz) with 5000 kW effective radiated power ("ERP") (directional) and 451.0 meters antenna height above average terrain ("HAAT"). WBBH-TV has been allotted Channel 15 (476-482 MHz) for its digital TV operation and has been authorized to construct a facility (BMPCDT-20020221AAC) with 950 kW maximum ERP (non-directional) and 453.0 meters HAAT. The purpose of this report is to correct the site coordinates stated in the aforementioned construction permit, and request a small change in the broadcast facilities.

Antenna Site

There is no change in the existing antenna site. WBBH-DT is simply proposing to correct its site coordinates in order to align them with the corrected antenna structure registration (1231697). Since the coordinates have changed, it is possible that the elevation data has changed as well. This report serves to note any and all necessary changes and their effects.

The WBBH-DT antenna site is located on at 11251 Highway 31 in Punta Gorda, Florida.

The INCORRECT geographic coordinates as listed in the allotment and construction permit are:

North Latitude: 26° 49' 21"

West Longitude: 81° 45' 47"

(NAD-27)

The CORRECT geographic coordinates of the existing tower, as specified on the aforementioned FCC antenna structure registration, are as follows:

North Latitude: 26° 49' 21.4"

West Longitude: 81° 45' 54.6"

(NAD-83)

When these coordinates are converted to NAD-27, the result is:

North Latitude: 26° 49' 21.2"

West Longitude: 81° 45' 54.3"

(NAD-27)

Antenna and Elevation Data

Antenna:	Andrew	ABBP14H3-HTP4X-15/41 or equivalent	
	Beam Tilt	0.75˚ electrical	
	Directional Max. Power Gain	45.8	16.6 dB (See Exhibit E-2 per §73.625)

Elevation of the site above mean sea level:	10.1 meters (33.0 feet)
Elevation of the top of existing supporting structure above ground including beacon	462.1 meters (1516.1 feet)
Elevation of the top of supporting structure above mean sea level including beacon	472.2 meters (1549.2 feet)
Height of DTV antenna radiation center meters above ground	453.1 meters (1486.5 feet)
Height of DTV antenna radiation center above mean sea level	463.2 meters (1519.7 feet)
Height of DTV antenna radiation center above average terrain	453.9 meters (1489.2 feet)

Authorized Effective Radiated Power

The maximum ERP authorized by the construction permit for the DTV operation is 950 kW (non-directional) at 453.0 meters HAAT. In this request, WBBH-DT is seeking to slightly increase its ERP, and use a directional antenna rather than the non-directional for which it has been approved. The use of this directional antenna permits WBBH-DT to increase its ERP by 50 kW to the final 1000 kW value under the Commission's rules. Effectively, WBBH-DT is requesting the right to replicate the service area of WZVN-DT, which has been authorized a maximum ERP of 1000 kW (directional) at an HAAT of 453.0 meters. Even though the power is being increased and the site is being relocated, the directional nature of this antenna will effectively help these changes not to extend the predicted 41 dBu contour in most directions beyond that authorized by the existing construction permit. However, where the directional pattern peaks, namely in the azimuthal directions near 138º (N ºE T) and 310º (N ºE T), the newly predicted 41 dBu contour may slightly extend that previously authorized. Due to this possibility, a full FCC Longley-Rice study was executed. The results of that study are discussed in detail under the "Other Stations and Interference Issues" section of this report.

The attached map (Exhibit E-3) shows the computed F(50,90) 48 dBu and 41 dBu contours predicted according to Section 73.625(b) of the Commission's rules for the corrected facilities. For comparison purposes, the predicted 41 dBu contour for the facilities authorized by the construction permit has also been included.

Principal Community Coverage

In MM Docket No. 00-39, the Commission adopted rules to require DTV stations to place a stronger TV signal over the principal community. The operation proposed by WBBH-DT places a predicted 48 dBu contour over the community of Fort Myers, Florida.

Contour Data

Utilizing the formula in Section 73.625(b)(2) for the effective heights shown on the attached tabulation, the depression angle A_h, for each azimuth has been calculated. The maximum radiation value has been used to calculate ERP where the vertical radiation pattern at these angles is greater than 90% of the maximum.

Table I provides the distances along the radials, spaced every 10 degrees in azimuth, to the predicted F(50,90) 48 and 41 dBu contours, the average elevations, and the effective antenna heights.

The distances along each radial to the limits of F(50,90) 48 dBu and 41 dBu contours were determined as specified in Section 73.625(b) by reference to the propagation data for Channels 14-69, as published by the Commission in Figures 10b and 10c, Section 73.699 of its rules.

Topographic Data

The average elevation data for each radial is based on the NGDC 3-second computerized terrain database.

Other Stations and Interference Issues

There are four total broadcast (two TV and two DTV) stations located within 0.5 km of the proposed site. No objectionable interference problems are anticipated, however, if any problems occur, the permittee will take the necessary steps to resolve them. There are no broadcast radio (AM or FM) stations within 3.22 km of the proposed site.

Even though there is no change in the actual existing site, the coordinate correction could lead to possible interference issues. (There is a distance of 0.202 km between the two sets of coordinates.) To error on the side of caution, an FCC Longley-Rice study was run using the new, correct, coordinates.

To perform the Longley-Rice study, a version of the Longley-Rice program described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998) was executed. This version uses the FCC's FORTRAN-77 code that has been modified only to the extent necessary (primarily I/O handling) for the program to run on a Win32/Intel i386-based platform.

Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system, and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, such as calculating new interference as total interference less baseline interference. Any variance effect is further reduced when using ratios of calculated population values such as measuring the incremental population affected as a percent of the total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km^2 using 3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids.

The results of the study showed that no new interference problems should be expected between WBBH-DT and the other NTSC or DTV stations within its coordination distance. Exhibit E-4 is a summary of this Longley-Rice study. In the application that authorized the granted construction permit, FCC File No. BMPCDT-20020221AAC, a waiver request was requested and granted to Section 73.623(a) based on Section 73.623(c)(5)(iii). The supporting Longley Rice study demonstrated that no interference resulted. This application specifies a reduction in ERP in the direction of Station WWHB-CA. The protection that results will be increased to Station WWHB-CA and no waiver request is believed necessary. If one is required it is requested hereby.

Environment Statement

The following broadcast stations are operating from the tower:

WZVN-DT [CP MOD]

WBBH-DT [Proposed CP MOD]

WBBH-TV, while not operating from the same tower, has high power licensed facilities approximately 200 meters from the WBBH-DT site. Due to this proximity, WBBH-TV will also be included in this study. The radio frequency field level ("RFF") contributions of each of the three stations will be calculated and summed to form a total representative value.

WZVN-DT [CP MOD]

Channel 41 Freq: 632-638 MHz Range

$S = \frac{33.4\,(F^2)\,ERP}{R^2}$ ERP = 1000 kW (Horizontal only)
R = 448.9 meters (antenna height above ground -2 meters)
F = 0.1 (assumed)

$S \leq 1.66\ \mu W/cm^2$

The limit for an uncontrolled environment (general population) for this frequency is 423.3 $\mu W/cm^2$.

WZVN-DT contributes less than 0.5% RFF level for an uncontrolled environment (general population) two meters above the ground.

WBBH-DT [Proposed CP MOD]

Channel 15 Freq: 476-482 MHz Range

$S = \frac{33.4\,(F^2)\,ERP}{R^2}$ ERP = 1000 kW (Horizontal only)
R = 451.1 meters (antenna height above ground -2 meters)
F = 0.1 (assumed)

$S \leq 1.64\ \mu W/cm^2$

The limit for an uncontrolled environment (general population) for this frequency is 319.3 $\mu W/cm^2$.

WBBH-DT contributes less than 0.6% RFF level for an uncontrolled environment (general population) two meters above the ground.

WBBH-TV [LIC]

Channel 20(+) Freq: 506-512 MHz Range

$S = \frac{33.4\ (F^2)\ ERP}{R^2}$ ERP = 5000 kW (Horizontal only)
R = 438.1 meters (antenna height above ground -2 meters)
F = 0.2 (assumed)

$S \leq 17.4\ \mu W/cm^2$

The limit for an uncontrolled environment (general population) for this frequency is 339.3 $\mu W/cm^2$.

WBBH-TV contributes less than 5.2% RFF level for an uncontrolled environment (general population) two meters above the ground.

Therefore the total RF percentage two meters above the ground at the base of the tower will still be less than 10% of the FCC guidelines, when all transmitters are operational.

The permittee indicates that all authorized personnel climbing the tower will be alerted to the potential zones of high radiation on the tower. Also should it be required, permittee indicates that it will operate with reduced power or terminate power completely while workers are on the tower.

Summary of Environmental Assessment

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations since the permittee indicates that the sole purpose of this application is to correct the existing tower coordinates and a slight change in effective radiated power and to adjust parameters to reflect the corrected site elevation. As demonstrated above the RFF percentage is less tan 10 % of the FCC guidelines. There are no other changes requested.

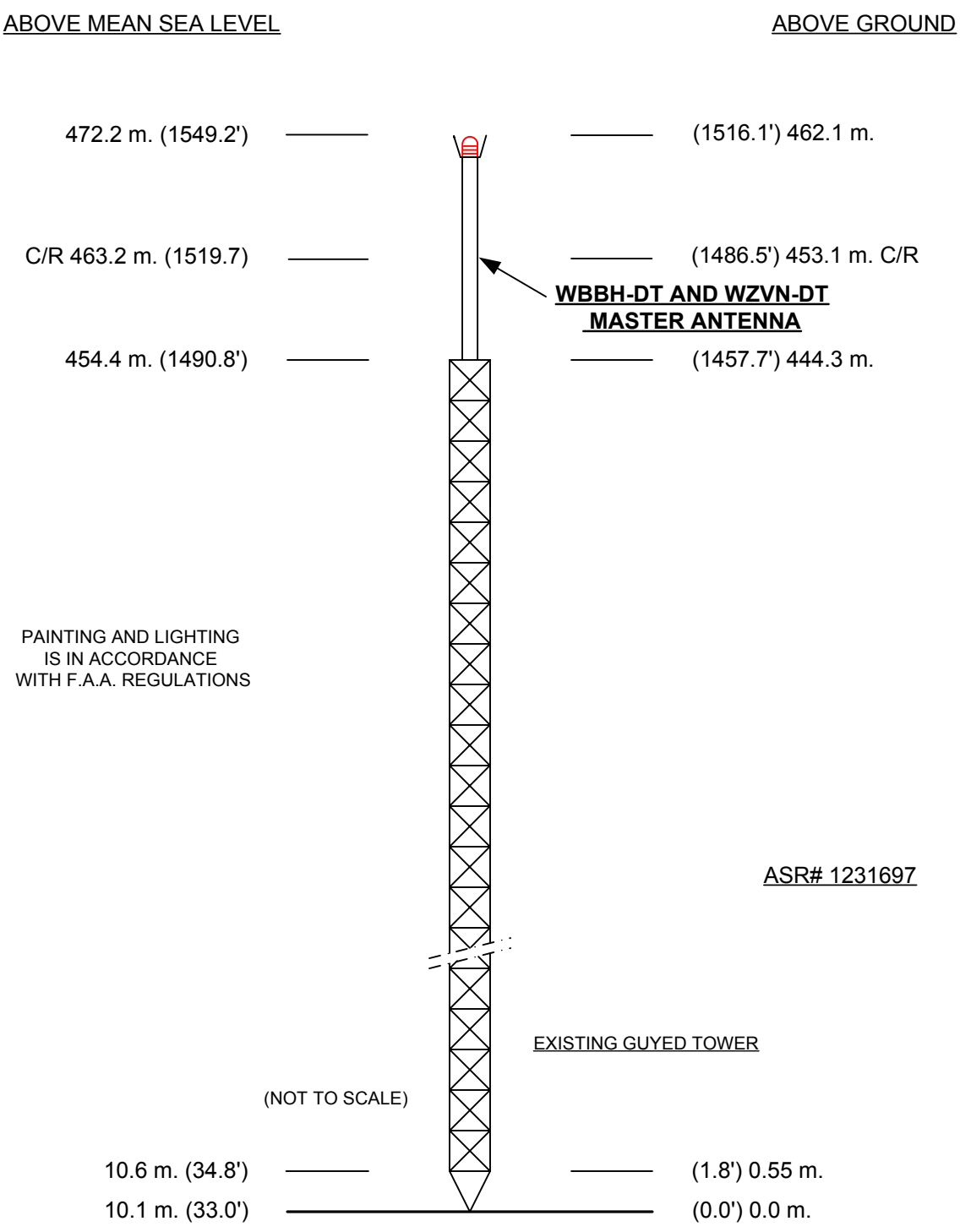


EXHIBIT E - 1
VERTICAL SKETCH
FOR THE PROPOSED DTV OPERATION OF
WBBH-DT, FT. MYERS, FLORIDA
APRIL 2003

COHEN, DIPPELL and EVERIST, P.C. CONSULTING ENGINEERS

HORIZONTAL PLANE PATTERN

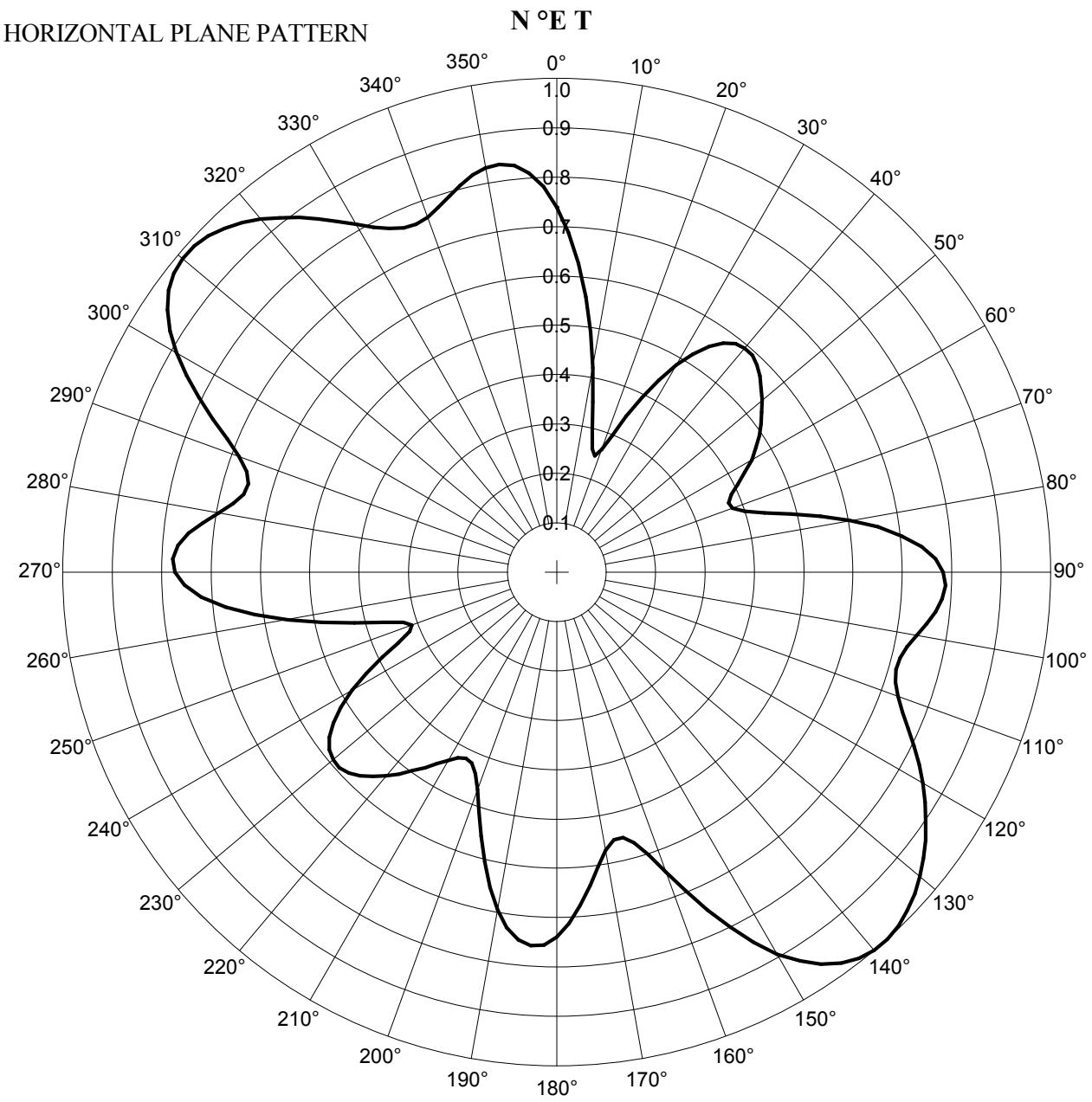


EXHIBIT E - 2a□
HORIZONTAL PLANE PATTERN□
WBBH-DT, FORT MYERS, FLORIDA□
CHANNEL 15 1000 kW (MAX ERP)□
453.9 METERS HAAT□
APRIL 2003□
□

COHEN, DIPPELL AND EVERIST, P.C.

ANDREW

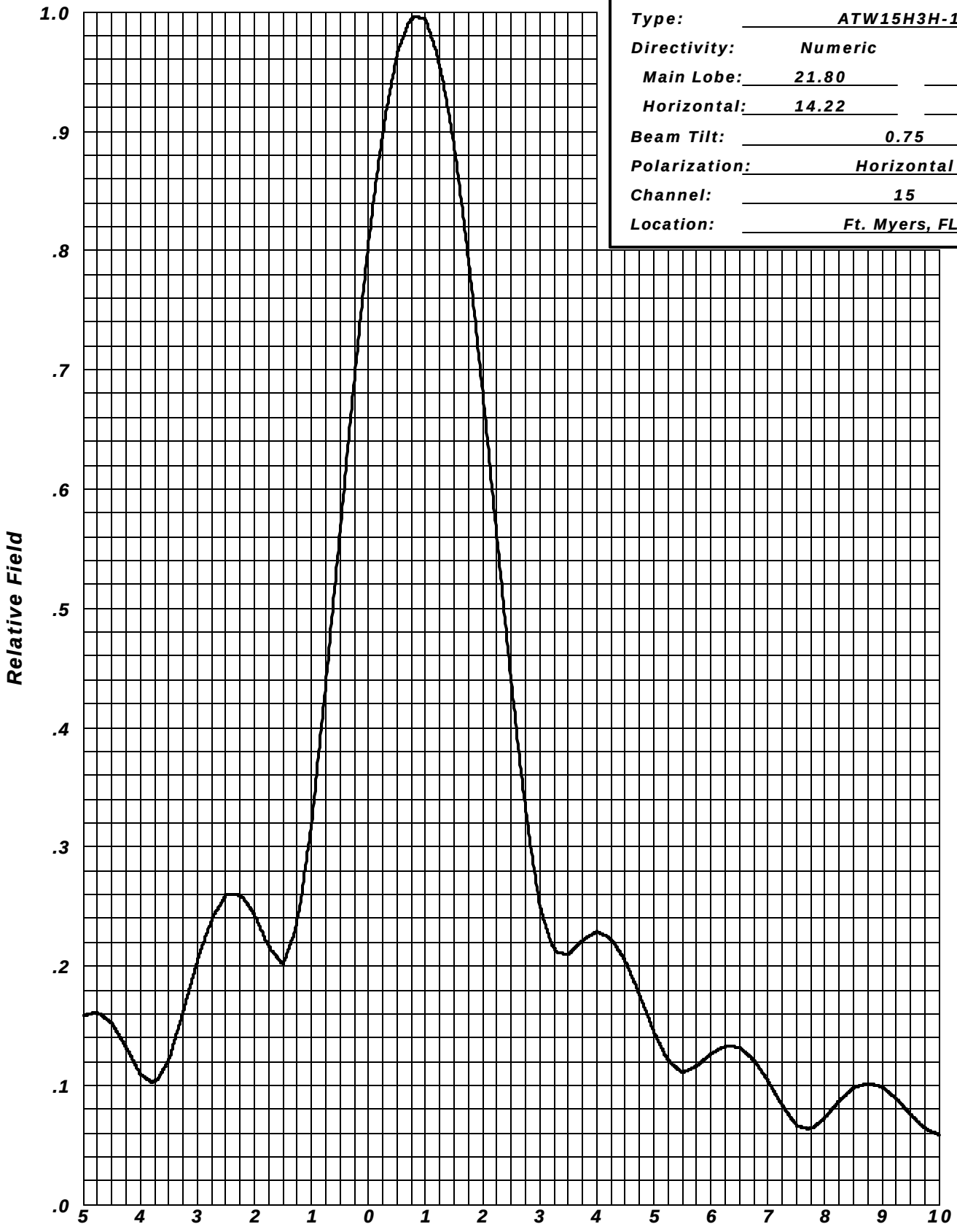
TABULATED DATA FOR AZIMUTH PATTERN
TYPE : CH15AZ-H-BID-PX4

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
0	0.739	-2.62	110	0.734	-2.68	220	0.538	-5.38	330	0.813	-1.79
2	0.688	-3.25	112	0.754	-2.45	222	0.557	-5.08	332	0.791	-2.03
4	0.627	-4.05	114	0.779	-2.17	224	0.573	-4.84	334	0.774	-2.22
6	0.560	-5.04	116	0.804	-1.89	226	0.585	-4.66	336	0.763	-2.34
8	0.491	-6.19	118	0.831	-1.61	228	0.592	-4.55	338	0.760	-2.38
10	0.420	-7.53	120	0.856	-1.35	230	0.591	-4.57	340	0.765	-2.33
12	0.353	-9.04	122	0.879	-1.12	232	0.584	-4.68	342	0.776	-2.20
14	0.298	-10.53	124	0.901	-0.90	234	0.569	-4.89	344	0.791	-2.04
16	0.260	-11.71	126	0.923	-0.70	236	0.545	-5.27	346	0.807	-1.86
18	0.248	-12.11	128	0.941	-0.52	238	0.515	-5.76	348	0.822	-1.70
20	0.264	-11.56	130	0.959	-0.36	240	0.479	-6.39	350	0.831	-1.61
22	0.299	-10.48	132	0.974	-0.22	242	0.436	-7.20	352	0.834	-1.58
24	0.345	-9.24	134	0.986	-0.12	244	0.393	-8.12	354	0.828	-1.64
26	0.393	-8.12	136	0.995	-0.04	246	0.352	-9.06	356	0.810	-1.83
28	0.440	-7.13	138	1.000	0.00	248	0.322	-9.85	358	0.781	-2.15
30	0.484	-6.30	140	0.999	-0.01	250	0.312	-10.13	360	0.739	-2.62
32	0.521	-5.67	142	0.992	-0.07	252	0.327	-9.71			
34	0.551	-5.18	144	0.979	-0.19	254	0.366	-8.73			
36	0.574	-4.83	146	0.957	-0.39	256	0.422	-7.50			
38	0.587	-4.63	148	0.928	-0.65	258	0.486	-6.27			
40	0.592	-4.55	150	0.893	-0.99	260	0.553	-5.14			
42	0.591	-4.57	152	0.849	-1.43	262	0.617	-4.19			
44	0.583	-4.69	154	0.800	-1.93	264	0.674	-3.43			
46	0.571	-4.87	156	0.749	-2.51	266	0.721	-2.84			
48	0.557	-5.08	158	0.695	-3.16	268	0.754	-2.45			
50	0.542	-5.32	160	0.645	-3.81	270	0.773	-2.24			
52	0.526	-5.58	162	0.602	-4.42	272	0.778	-2.18			
54	0.511	-5.84	164	0.570	-4.88	274	0.769	-2.28			
56	0.494	-6.13	166	0.554	-5.13	276	0.750	-2.50			
58	0.475	-6.46	168	0.554	-5.12	278	0.723	-2.81			
60	0.455	-6.85	170	0.572	-4.85	280	0.695	-3.17			
62	0.431	-7.31	172	0.602	-4.41	282	0.669	-3.49			
64	0.407	-7.80	174	0.638	-3.90	284	0.653	-3.71			
66	0.387	-8.25	176	0.677	-3.38	286	0.649	-3.76			
68	0.375	-8.52	178	0.712	-2.95	288	0.660	-3.61			
70	0.378	-8.44	180	0.739	-2.63	290	0.684	-3.30			
72	0.400	-7.97	182	0.755	-2.44	292	0.719	-2.87			
74	0.438	-7.16	184	0.758	-2.40	294	0.762	-2.36			
76	0.489	-6.22	186	0.749	-2.51	296	0.806	-1.88			
78	0.545	-5.28	188	0.727	-2.77	298	0.849	-1.42			
80	0.602	-4.41	190	0.694	-3.17	300	0.890	-1.01			
82	0.656	-3.67	192	0.653	-3.71	302	0.923	-0.70			
84	0.702	-3.07	194	0.605	-4.36	304	0.950	-0.44			
86	0.740	-2.62	196	0.556	-5.10	306	0.971	-0.25			
88	0.767	-2.31	198	0.510	-5.86	308	0.983	-0.15			
90	0.782	-2.13	200	0.469	-6.57	310	0.988	-0.10			
92	0.787	-2.08	202	0.440	-7.14	312	0.988	-0.10			
94	0.782	-2.13	204	0.423	-7.47	314	0.980	-0.17			
96	0.771	-2.26	206	0.419	-7.55	316	0.968	-0.28			
98	0.755	-2.44	208	0.426	-7.41	318	0.953	-0.42			
100	0.739	-2.63	210	0.440	-7.13	320	0.933	-0.60			
102	0.725	-2.80	212	0.457	-6.80	322	0.911	-0.81			
104	0.716	-2.90	214	0.477	-6.43	324	0.888	-1.03			
106	0.714	-2.92	216	0.497	-6.06	326	0.862	-1.28			
108	0.721	-2.85	218	0.518	-5.71	328	0.837	-1.54			

ANDREW

ELEVATION PATTERN

Type:	ATW15H3H-15	
Directivity:	Numeric	dBd
Main Lobe:	21.80	(13.38)
Horizontal:	14.22	(11.53)
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	15	
Location:	Ft. Myers, FL.	



ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

Exhibit E-2c

ANDREW

TABULATED DATA FOR ELEVATION PATTERN
TYPE : ATW15H3H-15

Angle Field dB -5 To 10 In 0.25 Increments	Angle Field dB 10 To 90 In 0.5 Increments	Angle Field dB	Angle Field dB
-5.00 0.158 -16.00	8.75 0.101 -19.89	35.00 0.216 -13.32	62.50 0.016 -35.76
-4.75 0.160 -15.90	9.00 0.099 -20.12	35.50 0.230 -12.75	63.00 0.015 -36.25
-4.50 0.152 -16.36	9.25 0.089 -21.06	36.00 0.224 -12.99	63.50 0.014 -37.39
-4.25 0.132 -17.60	9.50 0.076 -22.43	36.50 0.199 -14.03	64.00 0.011 -39.09
-4.00 0.109 -19.22	9.75 0.064 -23.83	37.00 0.160 -15.90	64.50 0.008 -41.51
-3.75 0.104 -19.68	10.00 0.059 -24.63	37.50 0.116 -18.69	65.00 0.006 -44.15
-3.50 0.121 -18.32	10.50 0.072 -22.90	38.00 0.076 -22.44	65.50 0.006 -44.88
-3.25 0.162 -15.82	11.00 0.083 -21.66	38.50 0.048 -26.39	66.00 0.007 -43.10
-3.00 0.205 -13.78	11.50 0.072 -22.88	39.00 0.041 -27.81	66.50 0.009 -41.11
-2.75 0.238 -12.46	12.00 0.049 -26.20	39.50 0.043 -27.29	67.00 0.011 -39.58
-2.50 0.260 -11.71	12.50 0.050 -25.99	40.00 0.043 -27.43	67.50 0.012 -38.71
-2.25 0.259 -11.74	13.00 0.070 -23.07	40.50 0.036 -28.83	68.00 0.012 -38.42
-2.00 0.243 -12.28	13.50 0.074 -22.60	41.00 0.027 -31.34	68.50 0.012 -38.49
-1.75 0.217 -13.26	14.00 0.053 -25.48	41.50 0.021 -33.68	69.00 0.011 -39.09
-1.50 0.201 -13.91	14.50 0.025 -32.22	42.00 0.021 -33.72	69.50 0.010 -40.09
-1.25 0.239 -12.43	15.00 0.048 -26.41	42.50 0.023 -32.77	70.00 0.008 -41.72
-1.00 0.319 -9.93	15.50 0.078 -22.11	43.00 0.023 -32.65	70.50 0.006 -44.01
-0.75 0.437 -7.20	16.00 0.086 -21.27	43.50 0.020 -33.89	71.00 0.004 -47.54
-0.50 0.565 -4.96	16.50 0.069 -23.17	44.00 0.015 -36.42	71.50 0.002 -53.56
-0.25 0.691 -3.21	17.00 0.044 -27.11	44.50 0.011 -39.17	72.00 0.001 -60.00
0.00 0.808 -1.85	17.50 0.052 -25.73	45.00 0.012 -38.56	72.50 0.002 -54.42
0.25 0.898 -0.93	18.00 0.077 -22.24	45.50 0.015 -36.42	73.00 0.004 -49.12
0.50 0.965 -0.31	18.50 0.087 -21.24	46.00 0.017 -35.29	73.50 0.005 -46.20
0.75 0.994 -0.06	19.00 0.072 -22.81	46.50 0.017 -35.49	74.00 0.006 -44.44
1.00 0.994 -0.05	19.50 0.043 -27.29	47.00 0.014 -36.83	74.50 0.007 -43.35
1.25 0.954 -0.41	20.00 0.033 -29.55	47.50 0.011 -38.86	75.00 0.007 -42.62
1.50 0.889 -1.03	20.50 0.056 -25.02	48.00 0.010 -40.00	75.50 0.008 -42.38
1.75 0.793 -2.02	21.00 0.069 -23.21	48.50 0.011 -39.02	76.00 0.008 -42.27
2.00 0.682 -3.33	21.50 0.060 -24.38	49.00 0.013 -37.59	76.50 0.008 -42.38
2.25 0.560 -5.04	22.00 0.033 -29.71	49.50 0.014 -37.02	77.00 0.007 -42.73
2.50 0.438 -7.16	22.50 0.005 -46.20	50.00 0.013 -37.52	77.50 0.007 -43.35
2.75 0.333 -9.55	23.00 0.038 -28.43	50.50 0.011 -39.09	78.00 0.006 -44.01
3.00 0.251 -12.02	23.50 0.057 -24.85	51.00 0.008 -41.41	78.50 0.006 -44.73
3.25 0.215 -13.34	24.00 0.057 -24.87	51.50 0.008 -42.05	79.00 0.005 -45.68
3.50 0.210 -13.56	24.50 0.040 -28.00	52.00 0.010 -40.26	79.50 0.005 -46.56
3.75 0.221 -13.10	25.00 0.018 -34.66	52.50 0.012 -38.34	80.00 0.004 -47.54
4.00 0.229 -12.80	25.50 0.030 -30.57	53.00 0.013 -37.46	80.50 0.004 -48.64
4.25 0.222 -13.07	26.00 0.048 -26.45	53.50 0.013 -37.65	81.00 0.003 -49.90
4.50 0.204 -13.79	26.50 0.052 -25.68	54.00 0.011 -39.17	81.50 0.003 -51.06
4.75 0.176 -15.10	27.00 0.043 -27.41	54.50 0.008 -42.27	82.00 0.002 -52.40
5.00 0.145 -16.78	27.50 0.031 -30.14	55.00 0.005 -46.56	82.50 0.002 -53.56
5.25 0.122 -18.29	28.00 0.038 -28.34	55.50 0.006 -44.88	83.00 0.002 -53.98
5.50 0.111 -19.11	28.50 0.054 -25.40	56.00 0.010 -40.45	83.50 0.002 -53.98
5.75 0.117 -18.67	29.00 0.060 -24.47	56.50 0.013 -37.65	84.00 0.002 -53.98
6.00 0.127 -17.96	29.50 0.052 -25.70	57.00 0.016 -36.19	84.50 0.002 -53.15
6.25 0.132 -17.56	30.00 0.037 -28.71	57.50 0.016 -35.70	85.00 0.002 -52.77
6.50 0.132 -17.60	30.50 0.038 -28.38	58.00 0.016 -36.14	85.50 0.002 -52.04
6.75 0.121 -18.36	31.00 0.059 -24.61	58.50 0.014 -37.33	86.00 0.003 -51.37
7.00 0.104 -19.68	31.50 0.075 -22.45	59.00 0.011 -39.33	86.50 0.003 -50.75
7.25 0.083 -21.58	32.00 0.077 -22.27	59.50 0.008 -41.51	87.00 0.003 -50.17
7.50 0.066 -23.57	32.50 0.064 -23.85	60.00 0.008 -41.83	87.50 0.003 -49.63
7.75 0.064 -23.83	33.00 0.057 -24.96	60.50 0.010 -40.00	88.00 0.003 -49.12
8.00 0.073 -22.71	33.50 0.085 -21.43	61.00 0.013 -37.99	88.50 0.004 -48.87
8.25 0.087 -21.21	34.00 0.134 -17.47	61.50 0.015 -36.59	89.00 0.004 -48.40
8.50 0.098 -20.18	34.50 0.182 -14.82	62.00 0.016 -35.86	89.50 0.004 -48.18

PRELIMINARY SPECIFICATION FOR ANDREW BROADBAND HORIZONTALLY POLARIZED PANEL ARRAY ANTENNA

ELECTRICAL CHARACTERISTICS:

CHANNEL:	*15* *41* *20 (ALTERNATE)*
FREQUENCY RANGE:	*Channel 15 476 to 482 MHz* *Channel 41 632 to 638 MHz* *Channel 20 506 to 512 MHz*
AZIMUTH PATTERN NUMBER:	*CH15AZ-H-BID-P4X* *CH41AZ-H-BID-P4X* *CH20AZ-H-BID-P4X*
ELEVATION PATTERN NUMBER:	*ABBP14H3-15* *ABBP14H3-41* *ABBP14H3-20*
AZIMUTH DIRECTIVITY:	*15: 2.10 (3.22 dB)* *41: 2.00 (3.01 dB)* *20: 2.05 (3.12 dB)*
ELEVATION DIRECTIVITY:	*15: 21.80 (13.38 dBd)* *41: 26.90 (14.30 dBd)* *20: 23.90 (13.78 dBd)*
PEAK POWER GAIN:	*15: 45.78 (16.61 dBd)* *41: 53.80 (17.31 dBd)* *20: 48.99 (16.90 dBd)*
GAIN AT HORIZONTAL:	*15: 29.92 (14.76 dBd)* *41: 26.18 (14.18 dBd)* *20: 30.48 (14.84 dBd)*
ELECTRICAL BEAM TILT:	*0.75 Degrees*
POWER HANDLING:	*22 kW Average Power, 8VSB Digital per Channel****
INPUT TYPE:	*7-3/16 inch EIA, 75 ohm*
VSWR (MAXIMUM):	*1.10 Over Each 6 MHz Channel*

THE ANTENNA DESIGN IS NOT INTENDED FOR SIMULTANEOUS 3 CHANNEL OPERATION BUT FOR THE EVENTUAL CHANGE OVER OF CAHNNEL 41 TO CHANNEL 20

PRELIMINARY SPECIFICATION FOR ANDREW BROADBAND HORIZONTALLY POLARIZED PANEL ARRAY ANTENNA

MECHANICAL CHARACTERISTICS:

MOUNTING CONFIGURATION: ****(Tower Interface supplied and installed by others.)***	*Top Mount**	
HEIGHT OF ANTENNA:	*54.1 feet*	
HEIGHT OF CENTER OF PRESSURE (B):	*27.05 feet*	
HEIGHT OF CENTER OF RADIATION:	*28.9 feet*	
OVERALL HEIGHT (A): *(Includes one 3.3 foot Lightning Rods)*	*57.4 feet*	
DEICING:	*Radome Enclosure*	
RADOME COLOR:	*WHITE (standard)*	
CLIMBING DEVICE:	*Internal climbing Ladder*	
Weight (with Radome)	*10,100 lbs.*	
WINDLOAD DATA: *(with Radome)*	*SHEAR:*	*16,335 lbs.*
	OVERTURNING MOMENT:	*465,000 lbs.-ft.*
ANTENNA AREA: *(with Radome)*	C_AA_F*: 225.0 square feet*	
Shear Below Tower Top: *(due to main power splitters)*	*1,560 lbs.*	*CaAf: 20.0 square feet*

This antenna is designed to be supported by a structure that can resist the antenna base reactions and which provides a support that is rigid in the three translational and three rotational degrees of freedom.

1 *Calculated weight is based on the* ***PRELIMINARY*** *design of the antenna. The actual weight of the antenna will be within "10% of the calculated weight. The actual weight will be given in the technical manual that accompanies the antenna. This figure is for the antenna only and does not include the antenna input section.*

2 *Based on a wind speed of* ***105 miles per hour (MPH)****, *a height above average terrain* ***(HAAT)*** *of* ***1,550 feet****, and a height above ground level* ***(HAGL)*** *of* ***1,549 feet*** *per* ***EIA/TIA-222-F****.*

****County is within 100 miles from hurricane oceanline. Tabulated values of basic wind speed have been adjusted in accordance with ASCE 7-88 to obtain 50-year recurrence intervals.***

NOTE: Localized conditions may require higher wind speed specifications than TIA/EIA specifications. Check with local authorities to verify wind speed requirements.

Broadcast Antenna System

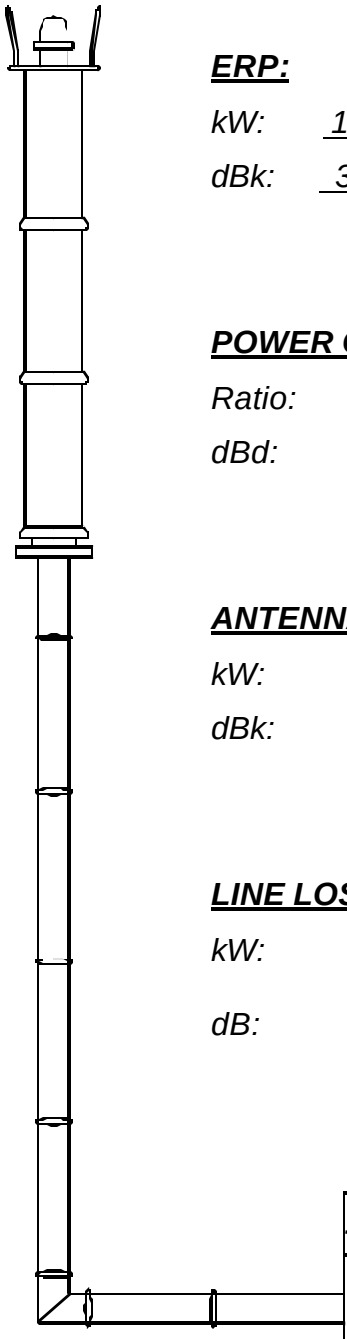
Power Analysis

WBBH-DT Channel 15
Ft. Myers, FL
Type: ABBP14H3-HTP4X-15/41

ANTENNA PARAMETERS:

Azimuth Directivity:
Hor Pol: 2.10 (3.22 dBd)

Elevation Directivity:
Hor Pol: 21.80 (13.38 dBd)



ERP:
kW: 1000
dBk: 30.00

POWER GAIN:
Ratio: 45.78
dBd: 16.61

ANTENNA INPUT:
kW: 21.84
dBk: 13.39

LINE LOSS:
kW: 7.46
dB: 1.276

TRANSMISSION LINE:

VERTICAL RUN:

Type: 7-3/16" 75 Ohm MACXLine®
Length: *1500 ft.*
Attenuation: *0.0810 dB/100 ft.*

HORIZONTAL RUN:

Type: 7-3/16" 75 Ohm MACXLine®
Length: *75 ft.*
Attenuation: *0.0810 dB/100 ft.*

Efficiency: *74.55%*

TRANSMITTER POWER:
kW: 29.30
dBk: 14.67

ANDREW®
Andrew Corporation
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

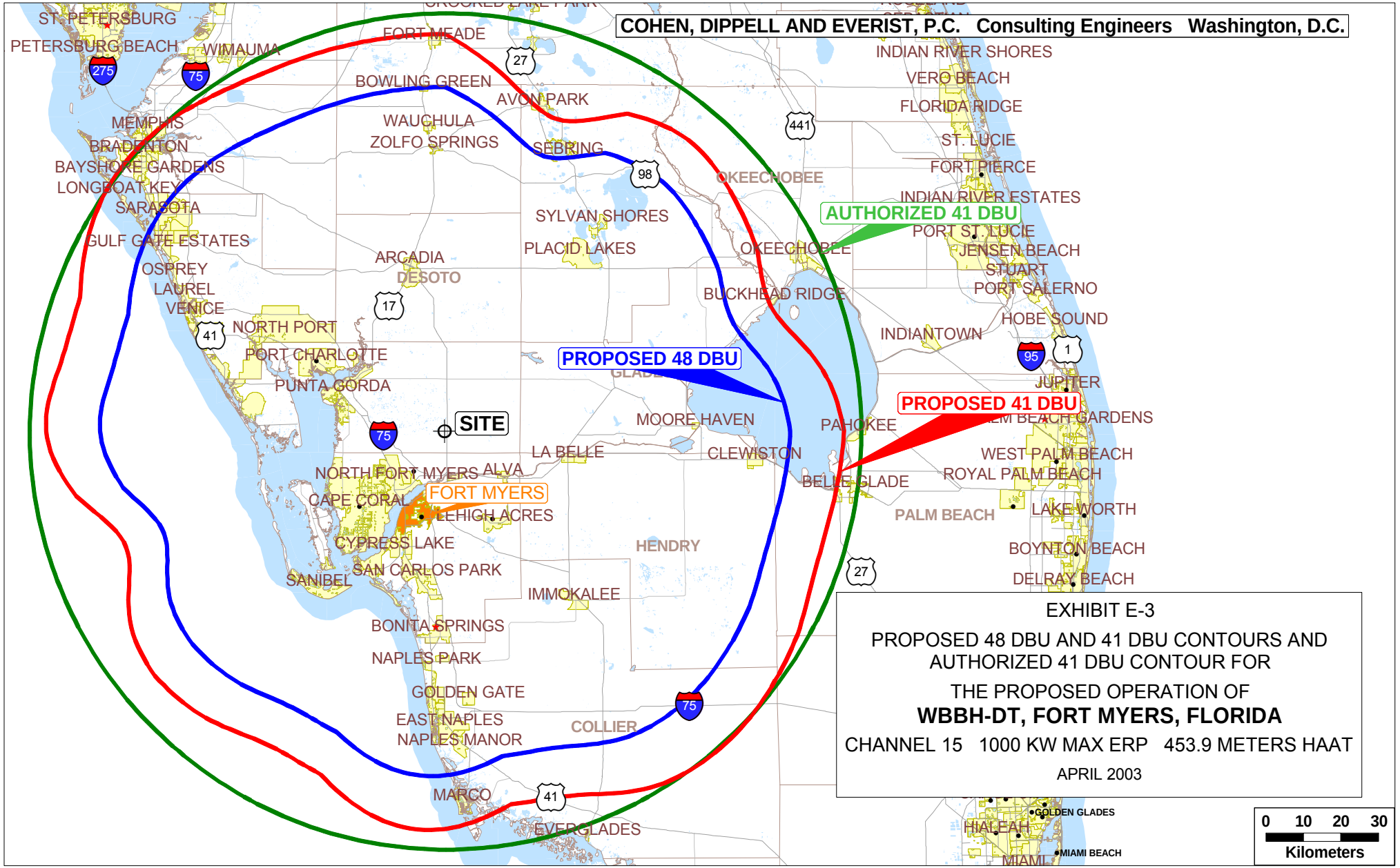


EXHIBIT E-3

PROPOSED 48 DBU AND 41 DBU CONTOURS AND AUTHORIZED 41 DBU CONTOUR FOR

THE PROPOSED OPERATION OF

WBBH-DT, FORT MYERS, FLORIDA

CHANNEL 15 1000 KW MAX ERP 453.9 METERS HAAT

APRIL 2003

EXHIBIT E-4

summary_file.txt
TV INTERFERENCE and SPACING ANALYSIS SUMMARY

Date: 04-29-2003 Time: 15:36:38

Record Selected for Analysis

WBBH-dt OTHER -RMG938 FORT MYERS FL US
Channel 15 ERP 1000 kW HAAT 0 m RCAMSL 00463 m
Latitude 26 -49-21 Longitude 81 -45-54
Status APP Zone 3 Border
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Contour overlap to Class A station
WWHB-CA 15 STUART FL BPTTA 20010126ABL

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Analysis of Interference to Affected Station 1

DTV Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
14	WZWY-DT	ORLANDO FL	DTVPLN	-DTVP0118

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
27	WZWY	ORLANDO FL	DTVPLN	-NPLN0349

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
14	WRDQ	ORLANDO FL	BPCDT	-19991029AGT

Proposal causes no interference

##

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
14	WZWY-DT	ORLANDO FL	DTVPLN	-DTVP0118

Total scenarios = 1

Scenario 1 % New Interference 0.00 OK

##

Analysis of Interference to Affected Station 3

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
15	WCEU	NEW SMYRNA BEACH FL	DTVPLN	-NPLN0331

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
15	WCEU	NEW SMYRNA BEACH FL	BLCT	-19880129KF

Proposal causes no interference

##

Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
15	WWHB-CA	STUART FL	BPTTA	-20010126ABL

Proposal causes no interference

##

Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	WTWD-LP	ORLANDO FL	BLTTL	-20001020AAC

Proposal causes no interference

##

Analysis of Interference to Affected Station 6

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
16	WUSFTV	TAMPA FL	DTVPLN	-NPLN0333

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	WUSF-TV	TAMPA FL	BLET	-19810123KG

Total scenarios = 4

Scenario 1 % New Interference 0.01 OK

Scenario 2 % New Interference 0.01 OK

Scenario 3 % New Interference 0.01 OK

Scenario 4 % New Interference 0.01 OK

##

Analysis of Interference to Affected Station 7

DTV Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
16	WPBF-DT	TEQUESTA FL	DTVPLN	-DTVP0201

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
25	WPBF	TEQUESTA FL	DTVPLN	-NPLN0346

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	WPBF	TEQUESTA FL	BPCDT	-19991101AEG

Total scenarios = 1

Scenario 1 % New Interference 0.00 OK

##

Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
16	WPBF-DT	TEQUESTA FL	DTVPLN	-DTVP0201

Proposal causes no interference

##########

Analysis of Interference to Affected Station 9

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	WOCX-CA	SEBRING FL	BMJPTTA	-20010615BEN

Proposal causes no interference

##########

Analysis of Interference to Affected Station 10

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	WSVT-LP	TAMPA FL	BPTTL	-19990316JE

Proposal causes no interference

##########

Analysis of Interference to Affected Station 11

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
22	WCLF	CLEARWATER FL	DTVPLN	-NPLN0246

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
22	WCLF	CLEARWATER FL	BLCT	-20000124AAX

Proposal causes no interference

##########

Analysis of Interference to Affected Station 12

summary_file.txt

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
23	WXDT-LP	NAPLES FL	BLTTL	-20020730ABD

Proposal causes no interference

##

Analysis of Interference to Affected Station 13

DTV Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
15	WBBH-DT	FORT MYERS FL	DTVPLN	-DTVP0157

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
20	WBBHTV	FORT MYERS FL	DTVPLN	-NPLN0242

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
15	WBBH-dt	FORT MYERS FL	OTHER	-RMG938

##

DTV Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
15	WBBH-DT	FORT MYERS FL	DTVPLN	-DTVP0157

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
20	WBBHTV	FORT MYERS FL	DTVPLN	-NPLN0242

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
15	WBBH-dt	FORT MYERS FL	OTHER	-RMG938

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED