

BEFORE THE  
**Federal Communications Commission**

In the Matter of )  
 )  
 Amendment of Section 73.622 (b), ) RM-  
 Digital Television Table of Allotments, )  
 (Corpus Christi, Texas) )

**RECEIVED**

FEB 18 1999

FEDERAL COMMUNICATIONS COMMISSION  
 OFFICE OF THE SECRETARY

To: Chief, Mass Media Bureau

**PETITION FOR RULE MAKING**

Channel 3 of Corpus Christi, Inc, licensee of Television Broadcast Station KIII, Corpus Christi, Texas ("Petitioner"), through its attorneys and pursuant to Sections 1.419, 1.420 and 73.623 of the Commission's Rules, hereby requests that the Table of Allotments for Digital Television (DTV) Stations, Section 73.622 (b) of the Commission's Rules, be amended as follows:

<u>City</u>	<u>Channel No.</u>	
	<u>Present</u>	<u>Proposed</u>
Corpus Christi, Texas	47	8

In support of such request, the following is set forth.

1. Petitioner seeks to substitute DTV Channel 8 in lieu of DTV Channel 47 at Corpus Christi, Texas, for use by Station KIII at the same transmitter site authorized in Construction Permit BPCT-960723KF for use by KIII for its NTSC operation on Channel 3; DTV Channel 47 was allocated for use by KIII pursuant to a Sixth Report and Order in MM Docket No. 87-268, 12 FCC Rcd 14588 (1997), recon. granted in part, 13 FCC Rcd 7418 (1998).

2. As set forth in the attached engineering statement of Bernard R. Segal, P.E., the proposed DTV channel substitution is fully consistent with the requirements of Section 73.623 (c) of the Rules. Specifically, the proposed substitution of DTV Channel 8 at Corpus Christi, Texas, would comply with the principal community coverage requirements of Section 73.625 (a) and will not result in more than a two percent (2%) increase in interference to the population served by any other DTV station, DTV allotment or analog TV broadcast station or result in any affected station receiving interference in excess of ten percent (10%) of its population.

3. Accordingly, Petitioner submits that its proposed DTV channel substitution would serve the public interest and the Commission is respectfully requested to issue a Notice of Proposed Rule Making to implement the instant petition.

Respectfully submitted

CHANNEL 3 OF CORPUS CHRISTI, INC.

By: Robert B. Jacobi, *ran*  
Robert B. Jacobi

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Its Attorneys

February 18, 1999

Bernard R. Segal, P.E.  
Consulting Engineer  
Washington, DC

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**ENGINEERING STATEMENT  
PREPARED ON BEHALF OF  
CHANNEL 3 OF CORPUS CHRISTI, INC.  
CORPUS CHRISTI, TEXAS**

The instant Engineering Statement has been prepared on behalf of Channel 3 of Corpus Christi, Inc., the licensee of NTSC station KIII, Corpus Christi, Texas. Engineering support is provided for a petition to amend the DTV Table of Allotments, Section 73.622(b) of the Rules. The FCC allotted channel 47 for transitional DTV use for NTSC station KIII. Station KIII operates on VHF channel 3. The instant Engineering Statement provides support for amendment of the DTV Table of Allotments to specify channel 8 in lieu of channel 47.

The proposed channel 8 DTV allotment is for operation from the same site as specified in the outstanding construction permit, BPCT-960723KF, for a new tower for KIII. The geographic coordinates for the new KIII tower location are: 27° 39' 30" North Latitude; 97° 36' 04" West Longitude. The foregoing geographic coordinates are based on NAD 1927. The channel 8 DTV antenna will be installed near the top of the new tower within an approximately 40 foot aperture. The antenna radiation center will be 302 meters above mean sea level. The antenna radiation center height above average terrain will be

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289 meters. Terrain elevations from 3.2-16.1 km along the standard eight radials were obtained from the National Geophysical Data Center 30-second database. The data for the eight standard radials were supplemented by an additional radial at 60° True through the principal community, Corpus Christi.

A directional antenna will be employed with maximum effective radiated power of 160 kW. The particulars for the directional antenna are provided in Figures 1 through 4. Figure 1 is the azimuth pattern for the antenna as provided by the manufacturer. Figure 2 is a tabulation of relative field and effective radiated power data for the antenna. Figure 3 is the elevation pattern for the antenna and Figure 4 is a tabulation of data for the elevation pattern of Figure 3.

Studies are provided which demonstrate that the proposed change in the allotment table will permit a facility that satisfies the coverage and allocation criteria of Section 73.623(c) of the FCC Rules. Figure 5 is a map demonstrating the extent of coverage of the 36 dB $\mu$ , F(50,90) contour for the proposed allotment. Figure 6 is a tabulation of terrain elevation data and distances to the 36 dB $\mu$ , F(50,90) contour for the proposed allotment facilities.

Figure 5 demonstrates that the entire community of Corpus Christi will be encompassed by the DTV coverage contour and the proposed allotment, therefore, complies with the principal community coverage requirement of Section 73.625(a).

As to allocation concerns, the study provided herein as Figure 7 demonstrates that no NTSC station would receive interference from the proposed KIII-DT channel 8 facility which affects population in excess of the "de minimis" 2% allowable level. The cumulative interference, where the proposed KIII-DT facility would cause interference to any NTSC station, will not exceed the maximum allowable of 10%.

No DTV allotments on VHF channels 7, 8, and 9 are close enough for concern for the KIII-DT proposed channel 8 allotment. The closest DTV allotment is that for Houston, Texas, on channel 9. The separation of 295.9 km for this first adjacent channel situation is well beyond the range for consideration when the facilities are taken into account.

The study of Figure 7 was performed using an FCC matched computer analysis which takes into account both NTSC and DTV allocation factors. A computer using an Alpha processor was employed in conjunction with the FCC's FLR software. For each station studied, the reference information from Appendix B of the *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket Number 87-268* is listed in Figure 7 for comparison with the results obtained independently using the Alpha processor with the FCC's FLR software. The independently determined calculation results are in good agreement with the FCC's Appendix B results except for the current service population for KTBC-TV, Austin, Texas, channel 7. However, the discrepancy of 24,000 persons is unimportant since the proposed KIII-DT operation would not cause interference to KTBC-TV, anyway.

Two studies were performed. The first study took into account the current Appendix B allotment facilities that provided a reference for comparison with the results of the second study which included the effect of the proposed new channel 8 DTV allotment for KIII-DT use. In no instance would the FCC allowable 2% de minimis interference level be exceeded toward any NTSC station, and in no instance where the proposed KIII-DT facility would cause

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Consulting Engineer  
Washington, DC

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Engineering Statement  
Channel 3 of Corpus Christi, Inc., Corpus Christi, Texas

Page 5

interference, would the maximum cumulative 10% allowable interference limit be exceeded to any NTSC station. As stated earlier, no DTV interference concerns are implicated. The proposed allotment satisfies all FCC criteria.

The channel 8 allotment proposed for KIII-DT use would provide 100% population service replication relative to the existing KIII Grade B service population

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 17, 1999.



Bernard R. Segal, P.E.

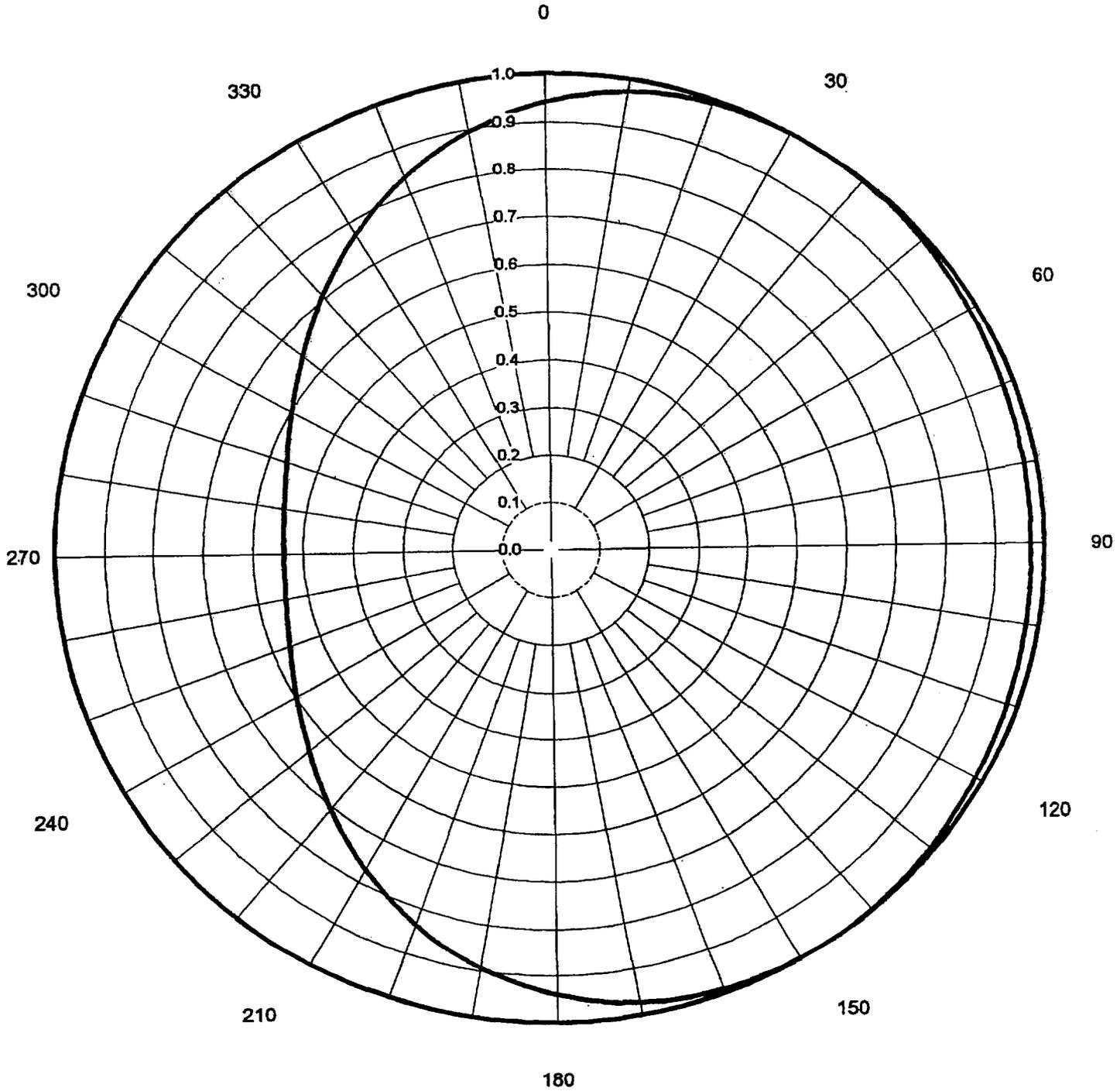


Proposal Number **DCA-8171**  
Date **11-Feb-99**  
Call Letters **KIII-DT** Channel **8**  
Location **Corpus Christi, TX**  
Customer  
Antenna Type **THV-6A8 C135**

**AZIMUTH PATTERN**

Gain **1.35** (**1.30 dB**)  
Calculated / Measured **Calculated**

Frequency **183.00 MHz**  
Drawing # **THV-C135-8**



**ENGINEERING STATEMENT  
PREPARED ON BEHALF OF  
CHANNEL 3 OF CORPUS CHRISTI, INC.  
CORPUS CHRISTI, TEXAS**

Tabulation of Data for Azimuth Radiation Pattern

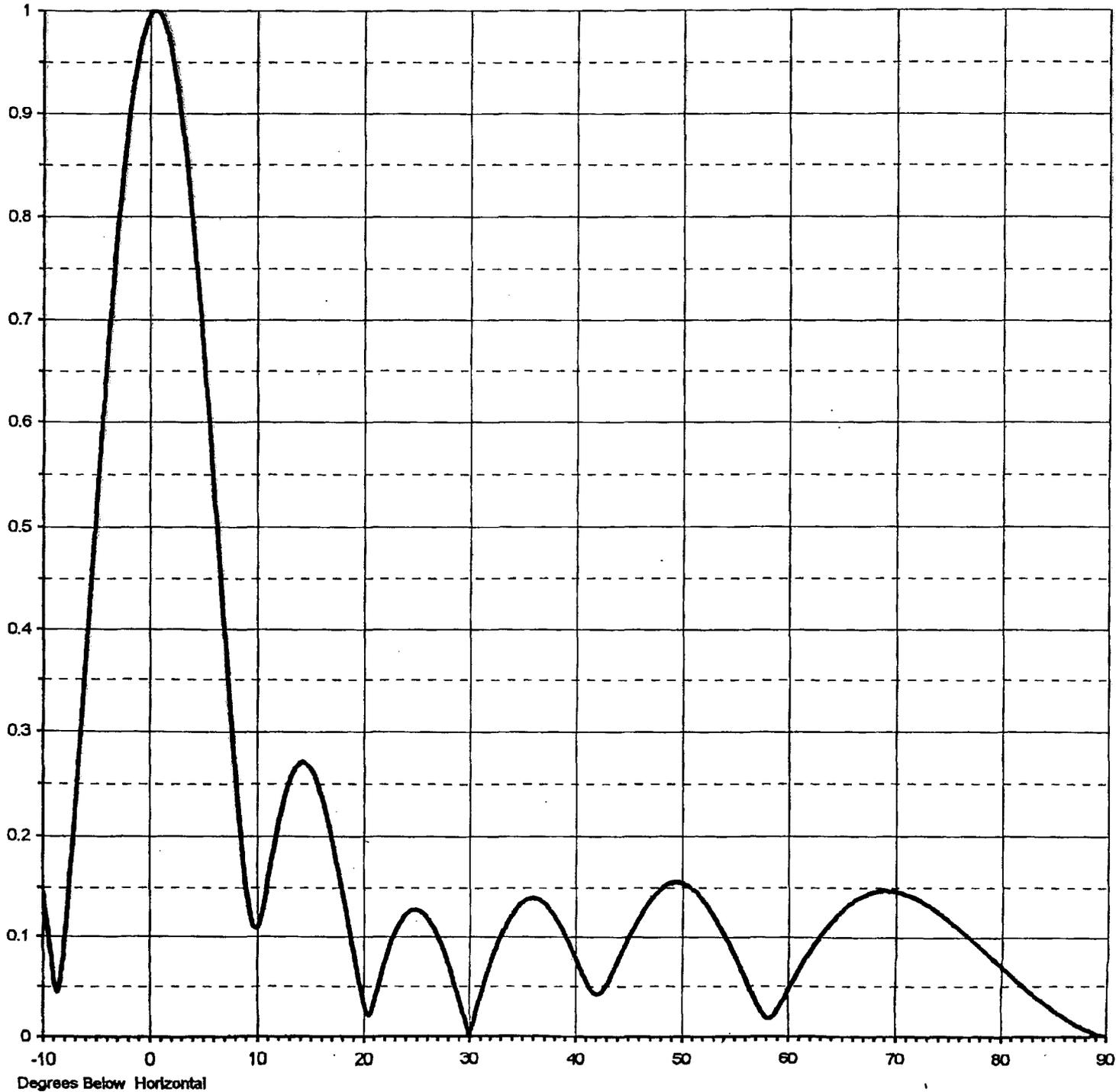
<u>Azimuth</u> (deg. T)	<u>Relative</u> <u>Field</u>	<u>Effective</u> <u>Radiated</u> <u>Power</u> (kW)	<u>Azimuth</u> (deg. T)	<u>Relative</u> <u>Field</u>	<u>Effective</u> <u>Radiated</u> <u>Power</u> (kW)
0	0.940	141	180	0.940	141
10	0.973	151	190	0.893	128
20	0.992	157	200	0.835	112
30	1.00	160	210	0.770	94.9
40	0.999	160	220	0.704	79.3
50	0.993	158	230	0.644	66.4
60	0.986	156	240	0.596	56.8
70	0.979	153	250	0.562	50.5
80	0.975	152	260	0.543	47.2
90	0.974	152	270	0.536	46.0
100	0.975	152	280	0.543	47.2
110	0.979	153	290	0.562	50.2
120	0.986	156	300	0.596	56.8
130	0.993	158	310	0.644	66.4
140	0.999	160	320	0.704	79.3
150	1.00	160	330	0.770	94.9
160	0.992	157	340	0.835	112
170	0.973	151	350	0.893	128



Proposal Number **DCA-8171**  
Date **11-Feb-99**  
Call Letters **KIII-DT** Channel **8**  
Location **Corpus Christi, TX**  
Customer  
Antenna Type **THV-6A8 C135**

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>6.00</b>	<b>( 7.78 dB )</b>	Beam Tilt	<b>0.50 deg</b>
RMS Gain at Horizontal	<b>5.90</b>	<b>( 7.71 dB )</b>	Frequency	<b>183.00 MHz</b>
Calculated / Measured	<b>Calculated</b>		Drawing #	<b>06V060050-90</b>





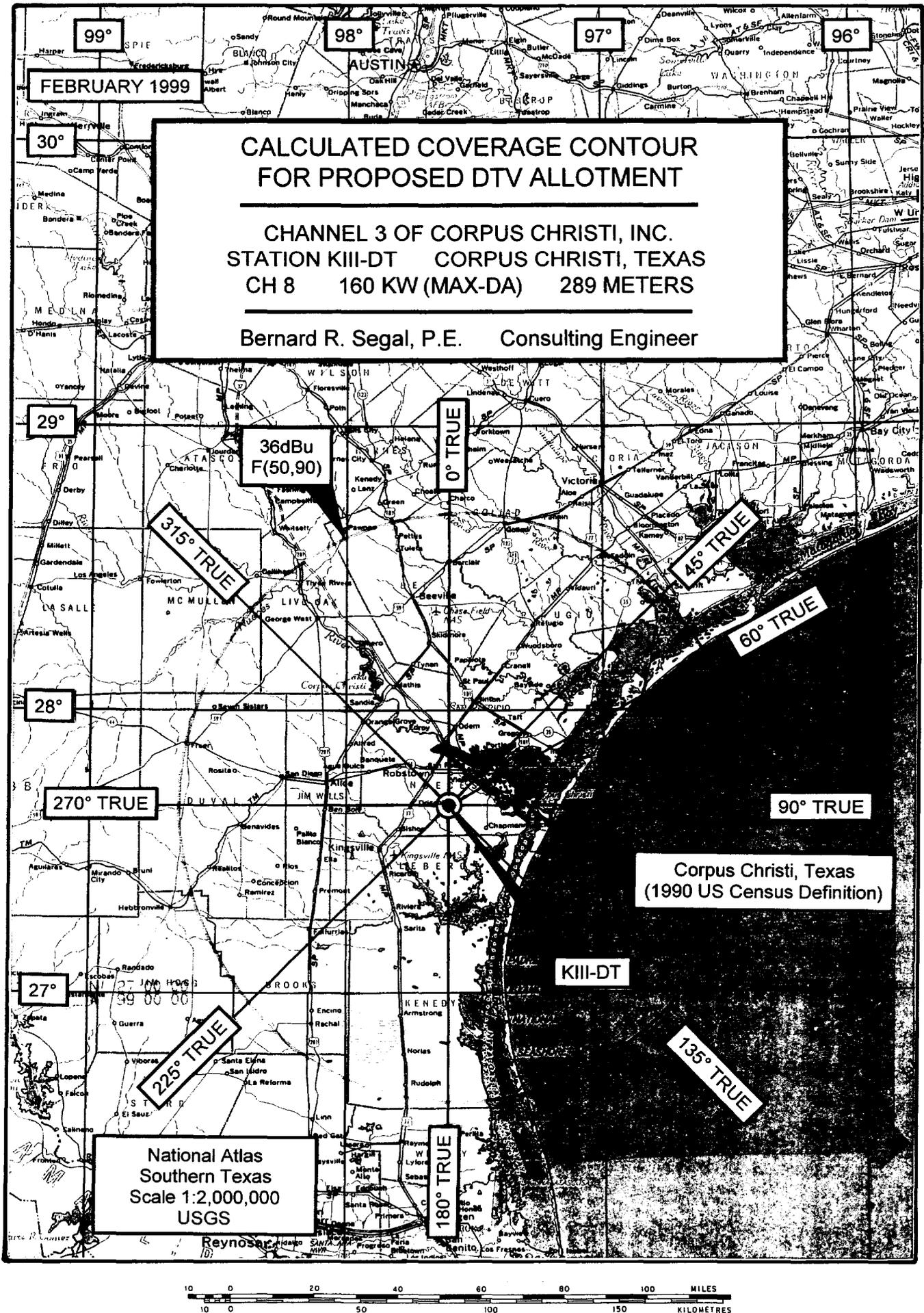
Proposal Number **DCA-8171**  
 Date **11-Feb-99**  
 Call Letters **KIII-DT** Channel **8**  
 Location **Corpus Christi, TX**  
 Customer  
 Antenna Type **THV-6A8 C135**

**TABULATION OF ELEVATION PATTERN**

Elevation Pattern Drawing #: **06V060050-90**

Angle	Field										
-10.0	0.150	2.4	0.939	10.6	0.125	30.5	0.015	51.0	0.149	71.5	0.141
-9.5	0.106	2.6	0.926	10.8	0.136	31.0	0.034	51.5	0.145	72.0	0.138
-9.0	0.062	2.8	0.911	11.0	0.147	31.5	0.052	52.0	0.139	72.5	0.135
-8.5	0.048	3.0	0.895	11.5	0.178	32.0	0.069	52.5	0.132	73.0	0.132
-8.0	0.091	3.2	0.878	12.0	0.206	32.5	0.084	53.0	0.124	73.5	0.129
-7.5	0.153	3.4	0.859	12.5	0.231	33.0	0.098	53.5	0.115	74.0	0.125
-7.0	0.222	3.6	0.840	13.0	0.249	33.5	0.110	54.0	0.105	74.5	0.121
-6.5	0.294	3.8	0.820	13.5	0.262	34.0	0.121	54.5	0.095	75.0	0.117
-6.0	0.367	4.0	0.798	14.0	0.269	34.5	0.129	55.0	0.084	75.5	0.113
-5.5	0.441	4.2	0.776	14.5	0.270	35.0	0.135	55.5	0.072	76.0	0.108
-5.0	0.515	4.4	0.753	15.0	0.266	35.5	0.138	56.0	0.061	76.5	0.104
-4.5	0.587	4.6	0.729	15.5	0.257	36.0	0.140	56.5	0.049	77.0	0.099
-4.0	0.656	4.8	0.704	16.0	0.242	36.5	0.139	57.0	0.038	77.5	0.094
-3.5	0.721	5.0	0.678	16.5	0.224	37.0	0.136	57.5	0.027	78.0	0.089
-3.0	0.781	5.2	0.652	17.0	0.202	37.5	0.130	58.0	0.019	78.5	0.084
-2.8	0.804	5.4	0.626	17.5	0.177	38.0	0.123	58.5	0.018	79.0	0.079
-2.6	0.825	5.6	0.599	18.0	0.151	38.5	0.115	59.0	0.024	79.5	0.075
-2.4	0.846	5.8	0.571	18.5	0.123	39.0	0.105	59.5	0.033	80.0	0.070
-2.2	0.865	6.0	0.544	19.0	0.094	39.5	0.093	60.0	0.044	80.5	0.065
-2.0	0.883	6.2	0.516	19.5	0.066	40.0	0.081	60.5	0.054	81.0	0.060
-1.8	0.900	6.4	0.487	20.0	0.040	40.5	0.069	61.0	0.064	81.5	0.055
-1.6	0.916	6.6	0.459	20.5	0.022	41.0	0.058	61.5	0.074	82.0	0.051
-1.4	0.930	6.8	0.431	21.0	0.029	41.5	0.048	62.0	0.083	82.5	0.046
-1.2	0.944	7.0	0.403	21.5	0.049	42.0	0.043	62.5	0.092	83.0	0.042
-1.0	0.956	7.2	0.375	22.0	0.069	42.5	0.043	63.0	0.100	83.5	0.037
-0.8	0.966	7.4	0.347	22.5	0.087	43.0	0.050	63.5	0.108	84.0	0.033
-0.6	0.975	7.6	0.320	23.0	0.102	43.5	0.060	64.0	0.114	84.5	0.029
-0.4	0.983	7.8	0.293	23.5	0.113	44.0	0.071	64.5	0.122	85.0	0.025
-0.2	0.989	8.0	0.267	24.0	0.122	44.5	0.083	65.0	0.127	85.5	0.022
0.0	0.994	8.2	0.242	24.5	0.127	45.0	0.095	65.5	0.132	86.0	0.018
0.2	0.998	8.4	0.218	25.0	0.128	45.5	0.107	66.0	0.136	86.5	0.015
0.4	1.000	8.6	0.195	25.5	0.126	46.0	0.117	66.5	0.139	87.0	0.012
0.6	1.000	8.8	0.173	26.0	0.121	46.5	0.127	67.0	0.142	87.5	0.009
0.8	0.999	9.0	0.154	26.5	0.114	47.0	0.135	67.5	0.144	88.0	0.006
1.0	0.997	9.2	0.137	27.0	0.103	47.5	0.142	68.0	0.145	88.5	0.004
1.2	0.993	9.4	0.124	27.5	0.090	48.0	0.147	68.5	0.146	89.0	0.002
1.4	0.987	9.6	0.114	28.0	0.075	48.5	0.151	69.0	0.147	89.5	0.001
1.6	0.980	9.8	0.111	28.5	0.059	49.0	0.154	69.5	0.146	90.0	0.000
1.8	0.972	10.0	0.109	29.0	0.041	49.5	0.155	70.0	0.146		
2.0	0.963	10.2	0.111	29.5	0.023	50.0	0.154	70.5	0.144		
2.2	0.952	10.4	0.117	30.0	0.004	50.5	0.152	71.0	0.143		

Figure 5



**ENGINEERING STATEMENT  
PREPARED ON BEHALF OF  
CHANNEL 3 OF CORPUS CHRISTI, INC.  
CORPUS CHRISTI, TEXAS**

**Tabulation of Average Elevations and  
Distances to the DTV Coverage Contour**

Site Coordinates:    27° 39' 30" North Latitude  
                          97° 36' 04" West Longitude

Antenna Radiation Center: 302 m AMSL

<u>Azimuth</u> (deg. T)	<u>3.2-16.1 km</u> <u>Terrain Avg.</u> (mAMSL)	<u>Radiation Center</u> <u>Above</u> <u>Terrain Avg.</u> (m)	<u>ERP</u> (kW)	<u>Distance to</u> <u>36 dB<math>\mu</math>, F(50,90)</u> <u>DTV</u> <u>Coverage Contour</u> (km)
0	18	284	141	113.5
45	11	291	158	115.1
90	11	291	152	114.7
135	11	291	159	115.2
180	10	292	141	114.2
225	12	290	72.7	107.9
270	15	287	46.0	103.7
315	18	284	72.7	107.5
60	9	293	156	115.1
Average <sup>1</sup>	13	289		

<sup>1</sup> Only the data for the eight standard radials were used to determine the overall average.

