

MULLANEY ENGINEERING, INC.

9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

ENGINEERING EXHIBIT EE-1:

**MODIFICATION OF
CONSTRUCTION PERMIT**

**APPLICATION FOR MAXIMIZATION
OF POST-TRANSITION
DIGITAL TELEVISION PERMIT**

**ICA BROADCASTING I, LTD.
KOSA-DT
DIGITAL TELEVISION CHANNEL 7
ODESSA, TEXAS**

FCC FACILITY NUMBER 6865

JUNE 2008

**ENGINEERING EXHIBIT
IN SUPPORT OF
APPLICATION FOR MODIFICATION
OF CONSTRUCTION PERMIT FOR
MAXIMIZATION OF POST-TRANSITION
DIGITAL TELEVISION FACILITY

DIGITAL TELEVISION STATION KOSA-DT
ODESSA, TEXAS**

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KOSA-DT**

**DIGITAL TELEVISION CHANNEL 7
ODESSA, TEXAS**

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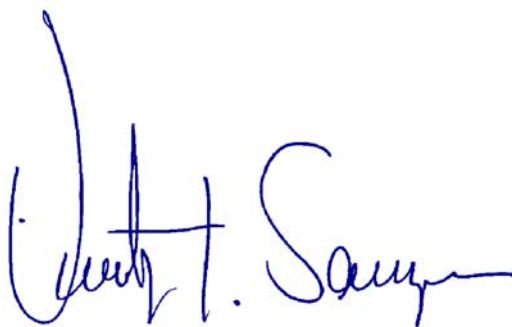
1. F.C.C. Form 301, Section III-D (DTV Engineering)
2. F.C.C. Form 301, Section III (Preparer's Certification)
3. Declaration of Engineer
4. Narrative Statement
5. Figure 1, Proposed Antenna Details
6. Figure 2, Proposed Digital Service Contours
7. Figure 3, Interference Study - OET Bulletin No. 69 Study

DECLARATION

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by ICA BROADCASTING I, LTD., to prepare the instant engineering exhibit in support of *an Application for Modification of Construction Permit - Digital Television Broadcast Station - KOSA-DT, Odessa, Texas for Maximization of a Post-Transition Facility, FCC FACILITY ID NUMBER: 6865.*

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under the penalty of perjury that the foregoing is true and correct.



Timothy Z. Sawyer

Executed on the 19th day of June 2008

ENGINEERING EXHIBIT EE-1:

**MODIFICATION OF
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**APPLICATION FOR MAXIMIZATION
OF POST-TRANSITION
DIGITAL TELEVISION PERMIT**

ICA BROADCASTING I, LTD.

**KOSA-DT
DIGITAL TELEVISION CHANNEL 7
ODESSA, TEXAS**

FCC FACILITY NUMBER 6865

ENGINEERING STATEMENT

The technical exhibit, of which this narrative is part, was prepared on behalf of ICA Broadcasting I, LTD., in support of an application to modify the construction permit of Digital Television Station KOSA-DT, Odessa, Texas. The FCC facility identification number is 6865.

The proposed station will operate on Digital TV Channel 7 with an effective radiated power (ERP) of 48 kilowatts and an antenna height above average terrain (HAAT) of 226 meters utilizing a nondirectional antenna.

The request to modify the authorized construction permit is a result of the Commission's lifting of the August 3, 2004 "freeze" concerning expansion of service

area.¹ This instant application is intended to be filed by June 20, 2008 in response to the FCC notice.

KOSA-DT holds a post-transition construction permit to operate on its current analog channel 7 as a digital television facility (BPCDT-20080317AEC). That permit authorizes the use of a nondirectional antenna at its licensed analog transmitter site with a height of 226 meters above average terrain and an effective radiated power of 13.1 kilowatts. The supporting structure has been registered with the FCC and issued tower registration number 1233693.

KOSA-DT proposes to modify that permit by increasing the authorized effective radiated power to 48 kilowatts. No other changes are proposed.

The proposal would not be subject to environmental processing in accordance with 47 C.F.R. §1.1306. This proposal does not involve a site location specified under 47 C.F.R. §1.1307 (a)(1)-(7), or involve high intensity lighting under 47 C.F.R. §1.1307(a)(8) or result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 C.F.R. §1.1307(b).

This application conforms with all applicable rules and regulations of the Federal Communications Commission.

The proposed transmitting facility will consist of a ERI ATW12V3-ETO-7 nondirectional antenna, mounted on the existing guyed, uniform cross-section, steel tower. No increase in tower height will occur.

ANTENNA DETAILS (FIGURE 1)

Figure 1 contains the details of the proposed antenna as required by the Commission's rules. The antenna employs elliptical polarization and an electrical beam

¹

Public Notice "*Commission Lifts the Freeze On the Filing of Maximization Applications and Petitions for Digital Channel Substitutions, Effective Immediately*" DA 08-1213, released May 30, 2008.

tilt of 0.75 degrees. There are no changes to the antenna system from that previously authorized in the construction permit.

FCC F(50,90) COVERAGE CONTOURS (FIGURE 2)

The predicted 36 and 43 dBu f(50,90) coverage contours were calculated in accordance with the provisions of 47 C.F.R. §73.313. In accordance with current FCC practice, no consideration was given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers from the proposed site were obtained from the N.G.D.C. 3-second terrain database. 360 radials, evenly spaced at 1-degree intervals were used for determining the average terrain elevations and the distance to the service contours.

The antenna radiation center heights above average terrain in the individual radial directions and the effective radiated power in the appropriate directions were used in conjunction with the appropriate F(50,90) curve contained with the Commission's rules.

The proposed digital service contours have been drawn on the map in Figure 2. As the map in Figure 2 shows, the 43 dBu (City Grade) contour from this proposal completely encompasses the city of license, Odessa, Texas.

POPULATION AND AREA

The population to be served within the predicted digital service contour was determined by a computer program that adds the population of census districts whose centroids lie within the contour as defined in OET Bulletin 69. The 2000 U.S. Census data was employed. The area within the digital service contour was calculated by a computer program using a root mean square algorithm.

Post-Transition Population Summary

Population Summary (2000 Census) OET Bulletin 69 Method	Appendix B	Proposed
Within Noise Limited Contour	285000	300678
Service Match to Appendix B	----	105.5%

INTERFERENCE STUDY

Figure 3, contains a detailed interference study using the procedures outlined in OET Bulletin Number 69 ² and complies with the 0.5 percent limit of new interference caused to Appendix B facilities and/or current post-transition authorizations of nearby stations of concern. Protection requirements to Class A television stations were also considered in this study if applicable.

ENVIRONMENTAL CONSIDERATIONS

The proposed facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields."

Power density contribution from the proposed operation was computed using the appropriate equations of the OET Bulletin 65. The maximum radiated power is 48 kilowatts horizontal and 7.2 kilowatts vertical (a 15 percent vertical power component is added to provide elliptical polarization of the signal.) The combined power is 55.2 kilowatts. Using a "worst-case" relative field pattern of 0.5 for all values 10 degrees and greater below the horizon, the power density was computed at a level of 2 meters above ground to be 0.0043 mW/cm² or 0.43 % of the recommended limit of 1.0 mW/cm²

²

The implementation of OET Bulletin number 69 for this study followed the guidelines of the bulletin as specified therein. A standard cell size of 2-kilometers was employed. Comparisons of various results of this computer program to the Commission's implementation of the bulletin shows excellent correlation.

for a controlled area at the base of the tower and 2.15 % of the recommended limit of 0.2 mW/cm² for an uncontrolled area.

Therefore, at ground level (and 2 meters above), at the base of the tower, the potential for radiofrequency radiation exposure will be well within the FCC guidelines.

The "worst-case" minimum distance from the antenna was computed to be 13.6 meters for a controlled environment. As the minimum distance is more than 195.2 meters above ground level, no exposure in excess of the guidelines to workers is predicted to occur from this proposal at ground level.

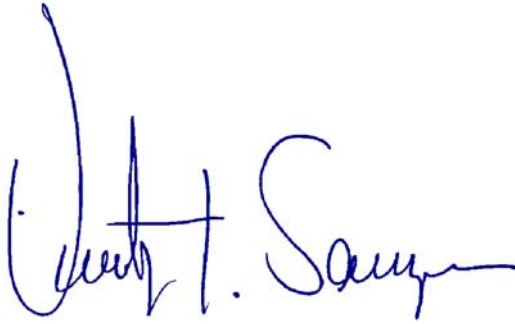
The permittee/licensee/applicant will coordinate with other users of the site and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of the FCC guidelines.

Suitable warning signs and a fence or other devices have been placed at the base of the tower to prevent unauthorized access. If work is required on the tower, the power to the antenna will be terminated or reduced as required. The applicant will fully comply with the provisions contained within the OET bulletin.

The tower has been in service since 1955 and as no new tower construction will occur this proposal is fully exempt from further environmental processing or notification.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

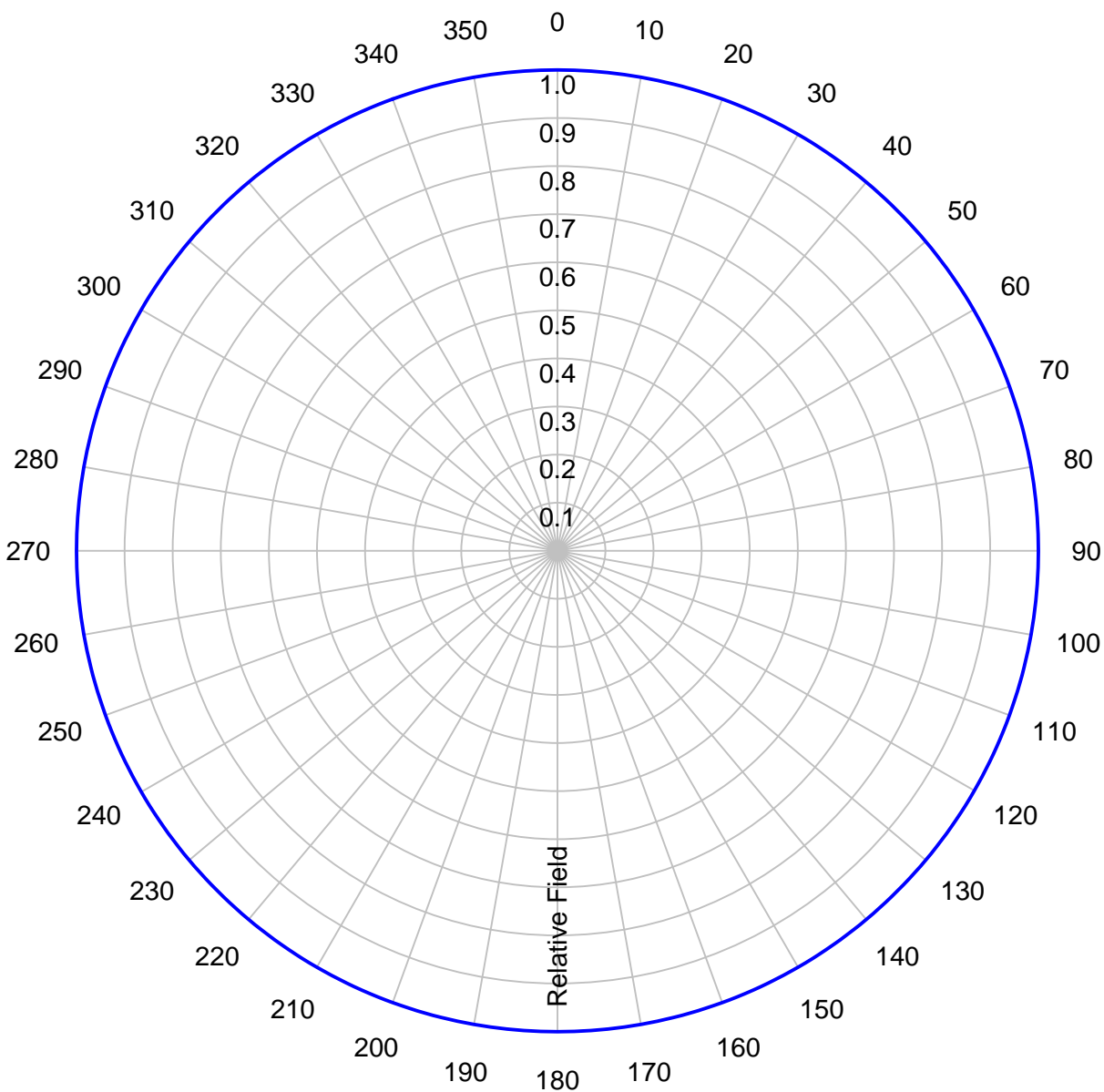
June 19, 2008

A handwritten signature in blue ink, reading "Timothy Z. Sawyer". The signature is written in a cursive style with a large initial "T" and "S".

Timothy Z Sawyer
Mullaney Engineering, Inc.

AZIMUTH PATTERN**Type:****ATW-VHF-O****Channel:****7****Directivity:****Numeric****dBd****1.00****0.00****Peak(s) at:****Location:****ODESSA, TEXAS****Polarization:****Horizontal**

Note: Pattern shape and directivity may vary with channel and mouting configuration.



Preliminary, subject to final design and review.

FIGURE 1

TABULATED DATA FOR AZIMUTH PATTERN FCC FILING FORMAT

Type ~~ATW~~ VHF-O

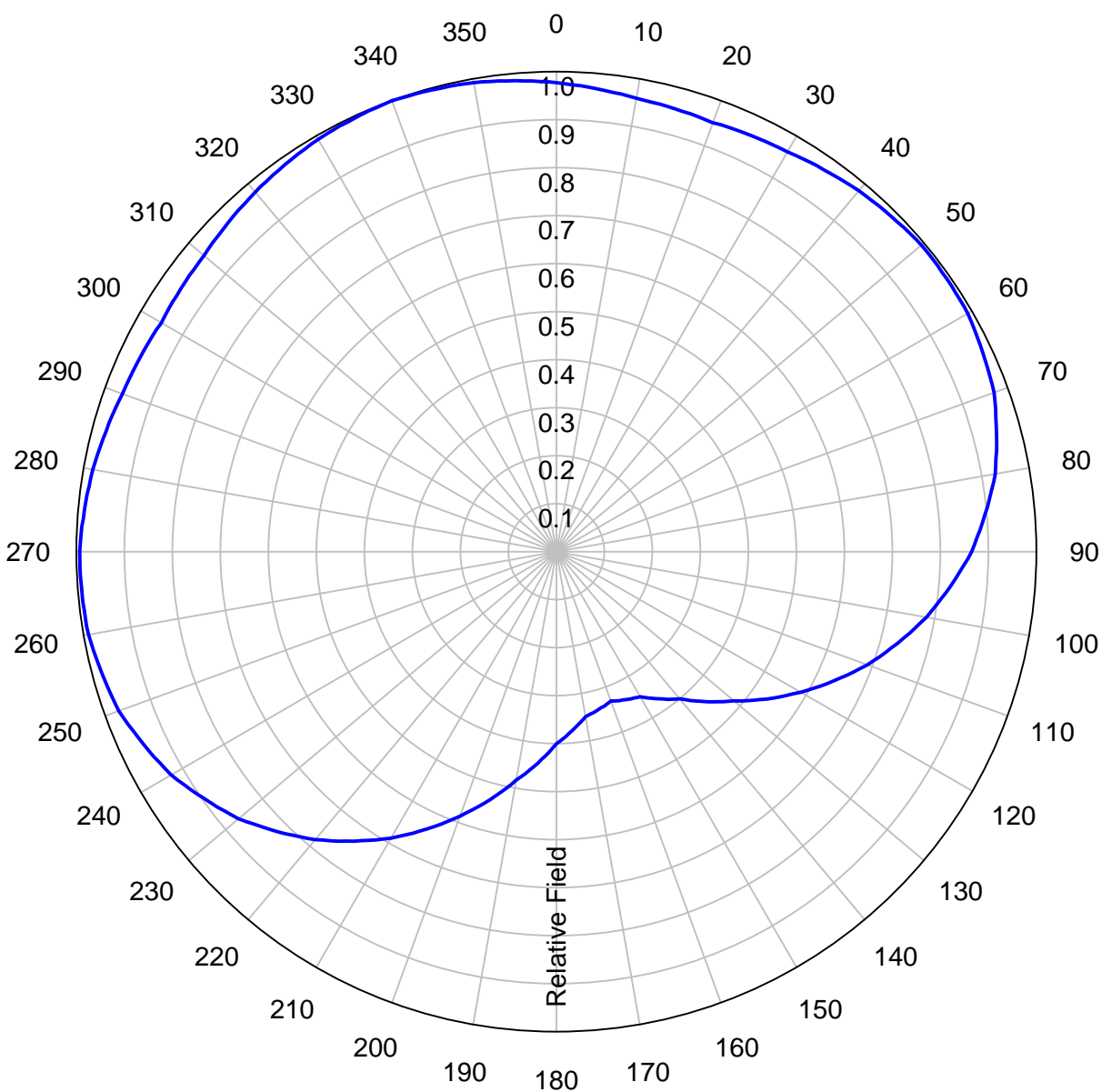
Polarization Horizontal

ANGLE	FIELD	ERP (kW)	ERP (dBk)
0	1.000	48.000	16.812
10	1.000	48.000	16.812
20	1.000	48.000	16.812
30	1.000	48.000	16.812
40	1.000	48.000	16.812
50	1.000	48.000	16.812
60	1.000	48.000	16.812
70	1.000	48.000	16.812
80	1.000	48.000	16.812
90	1.000	48.000	16.812
100	1.000	48.000	16.812
110	1.000	48.000	16.812
120	1.000	48.000	16.812
130	1.000	48.000	16.812
140	1.000	48.000	16.812
150	1.000	48.000	16.812
160	1.000	48.000	16.812
170	1.000	48.000	16.812
180	1.000	48.000	16.812
190	1.000	48.000	16.812
200	1.000	48.000	16.812
210	1.000	48.000	16.812
220	1.000	48.000	16.812
230	1.000	48.000	16.812
240	1.000	48.000	16.812
250	1.000	48.000	16.812
260	1.000	48.000	16.812
270	1.000	48.000	16.812
280	1.000	48.000	16.812
290	1.000	48.000	16.812
300	1.000	48.000	16.812
310	1.000	48.000	16.812
320	1.000	48.000	16.812
330	1.000	48.000	16.812
340	1.000	48.000	16.812
350	1.000	48.000	16.812

Preliminary, subject to final design and review.

AZIMUTH PATTERN**Type:****ATW-VHF-WC****Channel:****7****Directivity:****Numeric****dBd****1.50****1.76****Location:****ODESSA, TEXAS****Polarization:****Vertical****Peak(s) at:**

Note: Pattern shape and directivity may vary with
channel and mounting configuration.



Preliminary, subject to final design and review.

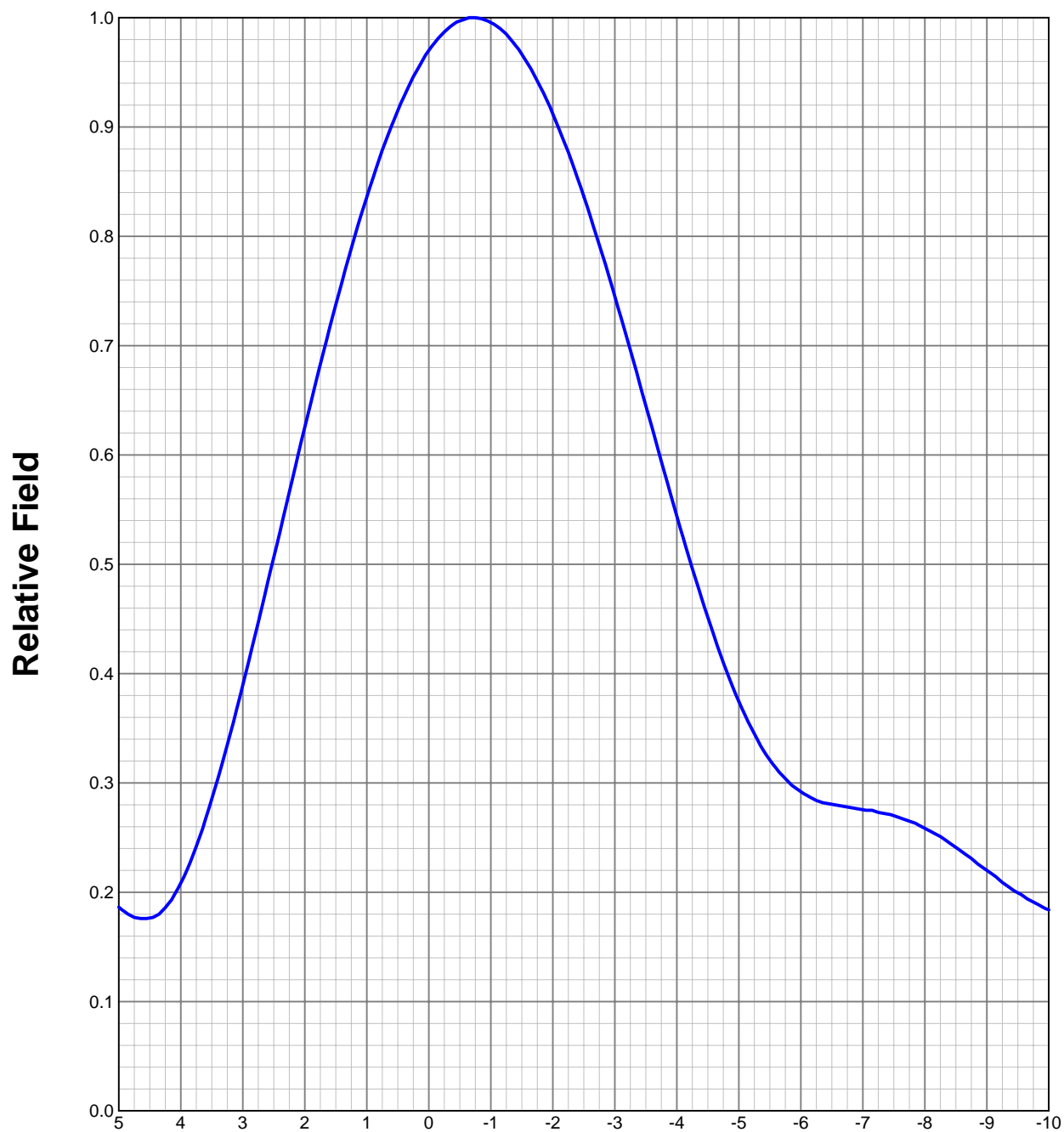
TABULATED DATA FOR AZIMUTH PATTERN FCC FILING FORMAT

Type: **ATW-VHF-WC**

Polarization: **Vertical**

ANGLE	FIELD	ERP (kW)	ERP (dBk)
0	0.977	6.873	8.371
10	0.959	6.622	8.210
20	0.951	6.512	8.137
30	0.962	6.663	8.237
40	0.981	6.929	8.407
50	0.993	7.100	8.512
60	0.990	7.057	8.486
70	0.970	6.774	8.309
80	0.928	6.201	7.924
90	0.865	5.387	7.314
100	0.783	4.414	6.449
110	0.689	3.418	5.338
120	0.586	2.472	3.931
130	0.483	1.680	2.252
140	0.400	1.152	0.615
150	0.349	0.877	-0.570
160	0.331	0.789	-1.030
170	0.349	0.877	-0.570
180	0.400	1.152	0.615
190	0.483	1.680	2.252
200	0.586	2.472	3.931
210	0.689	3.418	5.338
220	0.783	4.414	6.449
230	0.865	5.387	7.314
240	0.928	6.201	7.924
250	0.970	6.774	8.309
260	0.990	7.057	8.486
270	0.993	7.100	8.512
280	0.981	6.929	8.407
290	0.962	6.663	8.237
300	0.951	6.512	8.137
310	0.959	6.622	8.210
320	0.977	6.873	8.371
330	0.992	7.085	8.504
340	1.000	7.200	8.573
350	0.992	7.085	8.504

Preliminary, subject to final design and review.

ELEVATION PATTERN**Type:****ATW12V3H****Channel:****7****Directivity:****Numeric****dBd****Location:****ODESSA, TEXAS****Main Lobe:****12.00****10.79****Beam Tilt:****-0.75****Horizontal:****11.29****10.53****Polarization:****Horizontal**

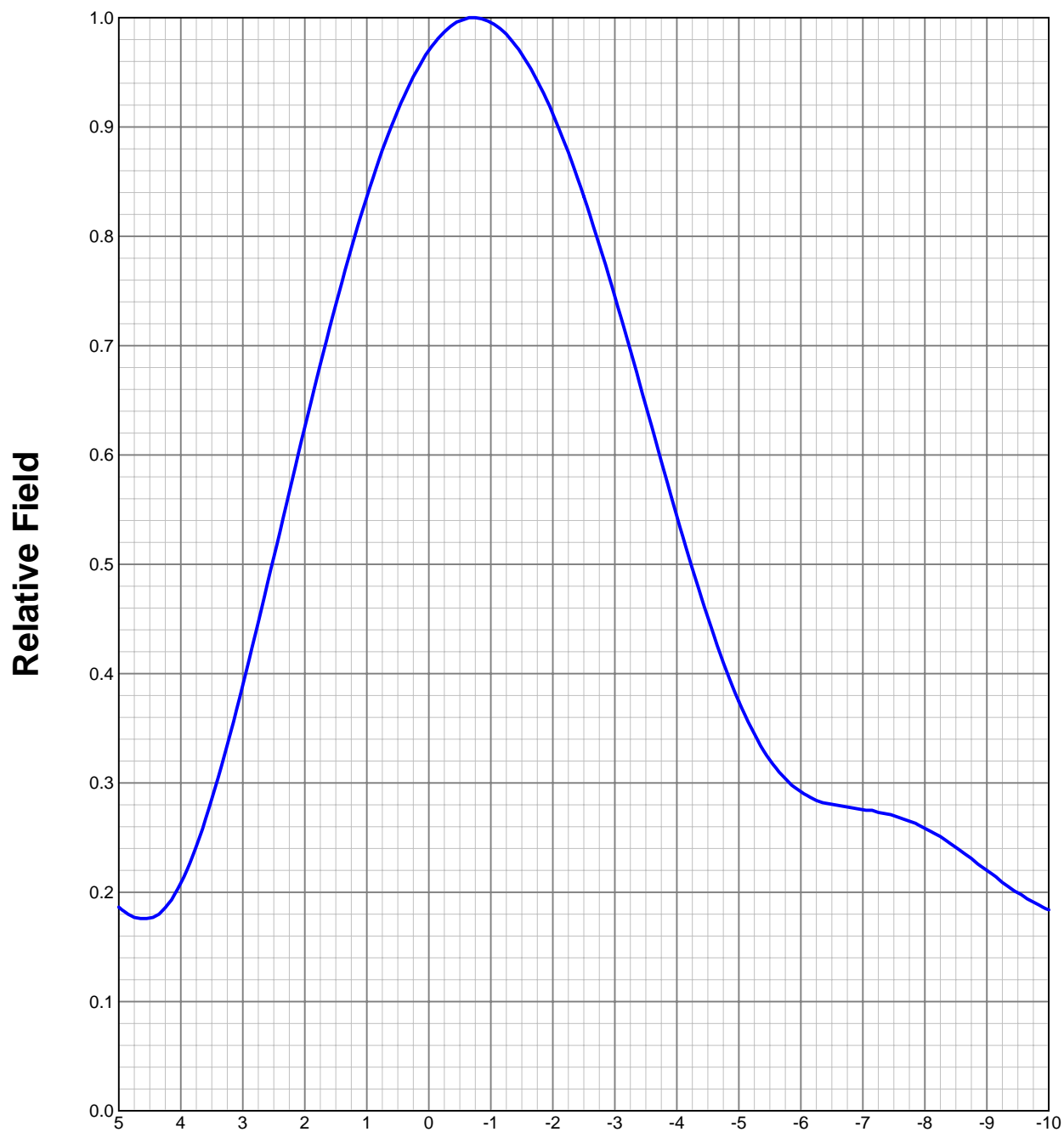
Preliminary, subject to final design and review.

TABULATED DATA FOR ELEVATION PATTERN

Type: ATW12V3H
Polarization: Horizontal

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.186	-14.59	-6.75	0.278	-11.12	-27.00	0.056	-25.11	-50.50
4.75	0.177	-15.04	-7.00	0.276	-11.20	-27.50	0.066	-23.61	-51.00
4.50	0.176	-15.07	-7.25	0.273	-11.28	-28.00	0.073	-22.67	-51.50
4.25	0.186	-14.61	-7.50	0.270	-11.37	-28.50	0.075	-22.50	-52.00
4.00	0.209	-13.62	-7.75	0.265	-11.54	-29.00	0.072	-22.79	-52.50
3.75	0.242	-12.32	-8.00	0.259	-11.75	-29.50	0.066	-23.61	-53.00
3.50	0.285	-10.89	-8.25	0.251	-12.01	-30.00	0.054	-25.27	-53.50
3.25	0.335	-9.50	-8.50	0.241	-12.36	-30.50	0.041	-27.85	-54.00
3.00	0.390	-8.19	-8.75	0.231	-12.73	-31.00	0.024	-32.40	-54.50
2.75	0.447	-6.99	-9.00	0.220	-13.15	-31.50	0.007	-42.50	-55.00
2.50	0.506	-5.91	-9.25	0.209	-13.60	-32.00	0.011	-38.79	-55.50
2.25	0.566	-4.94	-9.50	0.200	-14.00	-32.50	0.026	-31.70	-56.00
2.00	0.625	-4.08	-9.75	0.191	-14.38	-33.00	0.038	-28.29	-56.50
1.75	0.683	-3.31	-10.00	0.184	-14.70	-33.50	0.048	-26.38	-57.00
1.50	0.738	-2.64	-10.50	0.176	-15.07	-34.00	0.053	-25.51	-57.50
1.25	0.789	-2.06	-11.00	0.175	-15.14	-34.50	0.054	-25.35	-58.00
1.00	0.836	-1.56	-11.50	0.177	-15.04	-35.00	0.051	-25.93	-58.50
0.75	0.879	-1.12	-12.00	0.178	-14.99	-35.50	0.044	-27.13	-59.00
0.50	0.915	-0.77	-12.50	0.173	-15.21	-36.00	0.034	-29.37	-59.50
0.25	0.946	-0.48	-13.00	0.164	-15.73	-36.50	0.021	-33.56	-60.00
0.00	0.970	-0.26	-13.50	0.148	-16.59	-37.00	0.008	-41.94	-60.50
-0.25	0.987	-0.11	-14.00	0.129	-17.79	-37.50	0.011	-39.17	-61.00
-0.50	0.997	-0.03	-14.50	0.110	-19.21	-38.00	0.026	-31.87	-61.50
-0.75	1.000	0.00	-15.00	0.095	-20.45	-38.50	0.039	-28.18	-62.00
-1.00	0.996	-0.04	-15.50	0.091	-20.82	-39.00	0.050	-26.02	-62.50
-1.25	0.985	-0.13	-16.00	0.096	-20.35	-39.50	0.059	-24.51	-63.00
-1.50	0.966	-0.30	-16.50	0.106	-19.49	-40.00	0.066	-23.68	-63.50
-1.75	0.942	-0.52	-17.00	0.115	-18.79	-40.50	0.067	-23.48	-64.00
-2.00	0.912	-0.80	-17.50	0.119	-18.49	-41.00	0.066	-23.61	-64.50
-2.25	0.877	-1.14	-18.00	0.117	-18.60	-41.50	0.061	-24.29	-65.00
-2.50	0.837	-1.55	-18.50	0.109	-19.25	-42.00	0.053	-25.51	-65.50
-2.75	0.792	-2.03	-19.00	0.096	-20.40	-42.50	0.043	-27.33	-66.00
-3.00	0.745	-2.56	-19.50	0.077	-22.27	-43.00	0.031	-30.17	-66.50
-3.25	0.696	-3.15	-20.00	0.058	-24.73	-43.50	0.019	-34.42	-67.00
-3.50	0.645	-3.81	-20.50	0.042	-27.43	-44.00	0.014	-37.08	-67.50
-3.75	0.594	-4.52	-21.00	0.037	-28.64	-44.50	0.022	-33.15	-68.00
-4.00	0.544	-5.29	-21.50	0.043	-27.33	-45.00	0.034	-29.37	-68.50
-4.25	0.496	-6.09	-22.00	0.053	-25.51	-45.50	0.046	-26.74	-69.00
-4.50	0.452	-6.91	-22.50	0.061	-24.22	-46.00	0.056	-25.04	-69.50
-4.75	0.410	-7.74	-23.00	0.065	-23.74	-46.50	0.064	-23.94	-70.00
-5.00	0.375	-8.53	-23.50	0.064	-23.94	-47.00	0.069	-23.29	-70.50
-5.25	0.345	-9.24	-24.00	0.057	-24.88	-47.50	0.070	-23.10	-71.00
-5.50	0.321	-9.87	-24.50	0.046	-26.74	-48.00	0.069	-23.22	-71.50
-5.75	0.304	-10.34	-25.00	0.035	-29.12	-48.50	0.065	-23.81	-72.00
-6.00	0.292	-10.69	-25.50	0.028	-31.21	-49.00	0.058	-24.73	-72.50
-6.25	0.284	-10.93	-26.00	0.031	-30.17	-49.50	0.049	-26.20	-73.00
-6.50	0.281	-11.04	-26.50	0.042	-27.43	-50.00	0.037	-28.52	-73.50

Preliminary, subject to final design and review.

ELEVATION PATTERN**Type:****ATW12V3V****Channel:****7****Directivity:****Numeric****dBd****Location:****ODESSA, TEXAS****Main Lobe:****12.00****10.79****Beam Tilt:****-0.75****Horizontal:****11.29****10.53****Polarization:****Vertical**

Preliminary, subject to final design and review.

TABULATED DATA FOR ELEVATION PATTERN

Type: ATW12V3V

Polarization: Vertical

ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB	ANGLEFIELD	dB
5.00	0.186	-14.59	-6.75	0.278	-11.12	-27.00	0.056	-25.11	-50.50
4.75	0.177	-15.04	-7.00	0.276	-11.20	-27.50	0.066	-23.61	-51.00
4.50	0.176	-15.07	-7.25	0.273	-11.28	-28.00	0.073	-22.67	-51.50
4.25	0.186	-14.61	-7.50	0.270	-11.37	-28.50	0.075	-22.50	-52.00
4.00	0.209	-13.62	-7.75	0.265	-11.54	-29.00	0.072	-22.79	-52.50
3.75	0.242	-12.32	-8.00	0.259	-11.75	-29.50	0.066	-23.61	-53.00
3.50	0.285	-10.89	-8.25	0.251	-12.01	-30.00	0.054	-25.27	-53.50
3.25	0.335	-9.50	-8.50	0.241	-12.36	-30.50	0.041	-27.85	-54.00
3.00	0.390	-8.19	-8.75	0.231	-12.73	-31.00	0.024	-32.40	-54.50
2.75	0.447	-6.99	-9.00	0.220	-13.15	-31.50	0.007	-42.50	-55.00
2.50	0.506	-5.91	-9.25	0.209	-13.60	-32.00	0.011	-38.79	-55.50
2.25	0.566	-4.94	-9.50	0.200	-14.00	-32.50	0.026	-31.70	-56.00
2.00	0.625	-4.08	-9.75	0.191	-14.38	-33.00	0.038	-28.29	-56.50
1.75	0.683	-3.31	-10.00	0.184	-14.70	-33.50	0.048	-26.38	-57.00
1.50	0.738	-2.64	-10.50	0.176	-15.07	-34.00	0.053	-25.51	-57.50
1.25	0.789	-2.06	-11.00	0.175	-15.14	-34.50	0.054	-25.35	-58.00
1.00	0.836	-1.56	-11.50	0.177	-15.04	-35.00	0.051	-25.93	-58.50
0.75	0.879	-1.12	-12.00	0.178	-14.99	-35.50	0.044	-27.13	-59.00
0.50	0.915	-0.77	-12.50	0.173	-15.21	-36.00	0.034	-29.37	-59.50
0.25	0.946	-0.48	-13.00	0.164	-15.73	-36.50	0.021	-33.56	-60.00
0.00	0.970	-0.26	-13.50	0.148	-16.59	-37.00	0.008	-41.94	-60.50
-0.25	0.987	-0.11	-14.00	0.129	-17.79	-37.50	0.011	-39.17	-61.00
-0.50	0.997	-0.03	-14.50	0.110	-19.21	-38.00	0.026	-31.87	-61.50
-0.75	1.000	0.00	-15.00	0.095	-20.45	-38.50	0.039	-28.18	-62.00
-1.00	0.996	-0.04	-15.50	0.091	-20.82	-39.00	0.050	-26.02	-62.50
-1.25	0.985	-0.13	-16.00	0.096	-20.35	-39.50	0.059	-24.51	-63.00
-1.50	0.966	-0.30	-16.50	0.106	-19.49	-40.00	0.066	-23.68	-63.50
-1.75	0.942	-0.52	-17.00	0.115	-18.79	-40.50	0.067	-23.48	-64.00
-2.00	0.912	-0.80	-17.50	0.119	-18.49	-41.00	0.066	-23.61	-64.50
-2.25	0.877	-1.14	-18.00	0.117	-18.60	-41.50	0.061	-24.29	-65.00
-2.50	0.837	-1.55	-18.50	0.109	-19.25	-42.00	0.053	-25.51	-65.50
-2.75	0.792	-2.03	-19.00	0.096	-20.40	-42.50	0.043	-27.33	-66.00
-3.00	0.745	-2.56	-19.50	0.077	-22.27	-43.00	0.031	-30.17	-66.50
-3.25	0.696	-3.15	-20.00	0.058	-24.73	-43.50	0.019	-34.42	-67.00
-3.50	0.645	-3.81	-20.50	0.042	-27.43	-44.00	0.014	-37.08	-67.50
-3.75	0.594	-4.52	-21.00	0.037	-28.64	-44.50	0.022	-33.15	-68.00
-4.00	0.544	-5.29	-21.50	0.043	-27.33	-45.00	0.034	-29.37	-68.50
-4.25	0.496	-6.09	-22.00	0.053	-25.51	-45.50	0.046	-26.74	-69.00
-4.50	0.452	-6.91	-22.50	0.061	-24.22	-46.00	0.056	-25.04	-69.50
-4.75	0.410	-7.74	-23.00	0.065	-23.74	-46.50	0.064	-23.94	-70.00
-5.00	0.375	-8.53	-23.50	0.064	-23.94	-47.00	0.069	-23.29	-70.50
-5.25	0.345	-9.24	-24.00	0.057	-24.88	-47.50	0.070	-23.10	-71.00
-5.50	0.321	-9.87	-24.50	0.046	-26.74	-48.00	0.069	-23.22	-71.50
-5.75	0.304	-10.34	-25.00	0.035	-29.12	-48.50	0.065	-23.81	-72.00
-6.00	0.292	-10.69	-25.50	0.028	-31.21	-49.00	0.058	-24.73	-72.50
-6.25	0.284	-10.93	-26.00	0.031	-30.17	-49.50	0.049	-26.20	-73.00
-6.50	0.281	-11.04	-26.50	0.042	-27.43	-50.00	0.037	-28.52	-73.50

Preliminary, subject to final design and review.

KOSA-DT

Latitude: 31-51-50 N
Longitude: 102-34-41 W
Channel: 7
Frequency: 177.0 MHz
ERP: 48.00 kW
Antenna HAAT: 226.0 m
Antenna AMSL Height: 1164.4 m
Antenna AGL Height: 208.8 m
Site Elevation AMSL: 955.6 m
Horiz. Pattern: Omni

PROPOSED SERVICE CONTOURS

KOSA-DT CHANNEL 7 DIGITAL

48 KW 226 M HAAT

FIGURE 2

KOSA-DT

Midland

Odessa

36 DBU F(50,90)

43 DBU F(50,90)

ODESSA, TEXAS

36 DBU F(50,90) CONTOUR

Total Population Within Contour: 300,678
Total Housing Units Within Contour: 124,327
Total Area Within Contour: 31602.72 sq. km

Scale 1:1,500,000

0 30 60 90 km



FIGURE 3 - OET BULLETIN 69 INTERFERENCE STUDY RESULTS

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-14-2008 Time: 11:59:04

Record Selected for Analysis

KOSA-DT USERRECORD-01 ODESSA TX US
Channel 07 ERP 48. kW HAAT 227. m RCAMSL 01164 m
Latitude 031-51-50 Longitude 0102-34-42
Status APP Zone 2 Border
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.
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

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	50.000	223.1	100.6
45.0	50.000	246.0	102.5
90.0	50.000	259.6	103.3
135.0	50.000	243.1	102.3
180.0	50.000	233.2	101.5
225.0	50.000	228.5	101.1
270.0	50.000	187.7	97.0
315.0	50.000	197.3	98.0

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KOSA-DT 07 ODESSA TX USERRECORD01

and station

SHORT TO: KOSATV 07 ODESSA TX BDTV 1586
31 -51-50 102 -34-41
Req. separation 273.6 Actual separation 0.0 Short 273.6 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is within the Mexican coordination distance
Distance to border = 221.0km

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
07	KOSA-DT	ODESSA TX	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KVII-TV	AMARILLO TX	395.5	LIC	BDTV	-1490
07	KVIA-TV	EL PASO TX	368.7	LIC	BDTV	-1533
08	KOBR	ROSWELL NM	201.7	LIC	BDTV	-1088

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KVII-TV	AMARILLO TX	BDTV	-1490

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KOAT-TV	ALBUQUERQUE NM	414.7	LIC	BDTV	-1070
07	KOCO-TV	OKLAHOMA CITY OK	398.2	LIC	BDTV	-1242
08	KWET	CHEYENNE OK	202.0	LIC	BDTV	-1236
08	KACV-TV	AMARILLO TX	0.1	LIC	BDTV	-1491
07	KOSA-DT	ODESSA TX	395.5	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1

Before Analysis

Results for: 7A TX AMARILLO BDTV 1490 LIC
 HAAT 518.0 m, ATV ERP 21.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	350739	40823.1
not affected by terrain losses	350529	39390.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 7A TX AMARILLO BDTV 1490 LIC
 HAAT 518.0 m, ATV ERP 21.9 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	350739	40823.1
not affected by terrain losses	350529	39390.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	19	43.9
lost to ATV IX only	19	43.9
lost to all IX	19	43.9

Potential Interfering Stations Included in above Scenario 1

7A TX ODESSA USERRECORD01 APP
 *Percent Service lost without proposal: 0.0 to BDTV 1490
 *Percent Service lost with proposal: 0.0 to BDTV 1490

#####

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KVIA-TV	EL PASO TX	BDTV	-1533

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KOAT-TV	ALBUQUERQUE NM	379.0	LIC	BDTV	-1070
07	KOSA-DT	ODESSA TX	368.7	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2
 Scenario 1 Affected station 2
 Before Analysis

Results for: 7A TX EL PASO BDTV 1533 LIC
 HAAT 574.0 m, ATV ERP 38.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	864547	46636.3
not affected by terrain losses	854701	43090.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 7A TX EL PASO BDTV 1533 LIC
 HAAT 574.0 m, ATV ERP 38.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	864547	46636.3
not affected by terrain losses	854701	43090.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	8	232.4
lost to ATV IX only	8	232.4
lost to all IX	8	232.4

Potential Interfering Stations Included in above Scenario 1

7A TX ODESSA USERRECORD01 APP
 *Percent Service lost without proposal: 0.0 to BDTV 1533
 *Percent Service lost with proposal: 0.0 to BDTV 1533

#####

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application Ref. No.
08	KOBR	ROSWELL NM	BDTV -1088

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application Ref.
08	KACV-TV	AMARILLO TX	281.8	LIC	BDTV -1491
09	KWES-TV	ODESSA TX	175.3	LIC	BDTV -1587
07	KOSA-DT	ODESSA TX	201.7	APP	USERRECORD-01

Proposal causes no interference

#####

Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application Ref. No.
07	KOSA-DT	ODESSA TX	USERRECORD-01

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
07	KVII-TV	AMARILLO TX	395.5	LIC	BDTV	-1490
07	KVIA-TV	EL PASO TX	368.7	LIC	BDTV	-1533
08	KOBR	ROSWELL NM	201.7	LIC	BDTV	-1088

Total scenarios = 1

Result key: 3
Scenario 1 Affected station 4
Before Analysis

Results for: 7A TX ODESSA USERRECORD01 APP
HAAT 227.0 m, ATV ERP 48.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	301375	31957.3
not affected by terrain losses	298574	31573.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED