TECHNICAL EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
FM STATION KHTT
FACILITY ID 55704
MUSKOGEE, OKLAHOMA
CH 295C 100 KW 462 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for construction permit to modify the licensed facilities of FM station KHTT at Muskogee, Oklahoma (BLH-19820914AJ). Currently, KHTT is licensed to operate on channel 295C (106.9 MHz) with a nondirectional antenna maximum effective radiated power (ERP) of 100 kilowatts and an antenna radiation center eight above average terrain (HAAT) of 308 meters.

Purpose of Application

In response to a petition for rule making filed by Charles Crawford seeking to allot channel 295A to Boswell, Oklahoma, the FCC issued an Order to Show Cause directed to KHTT to show cause why its facilities should not be reclassified to a Class C0 facility because its current HAAT (308 meters) was less than the Class C minimum (450 meters) with an ERP of 100 kW.[1] In response to the Order to Show Cause, KHTT notified the FCC of its intent to file an application within 180 days of the date set forth in the Order to Show Cause to increase its HAAT to at least 451 meters in order to attain minimum Class C facilities. Therefore, this instant application proposes to increase the KHTT HAAT to 462 meters and maintain KHTT's Class C status. Specifically, it is proposed to operate from the a new transmitting site with a nondirectional ERP of 100 kW an HAAT of 462 meters. Processing in accordance with Section 73.215 is requested as detailed below. The instant application is considered a "minor" change in facilities in accordance with Section 73.3573(a)(1).

[1] See Order to Show Cause in RM-11175, adopted March 2, 2005, released March 4, 2005.

Response to Paragraph 5 - Antenna Structure Registration

It is proposed to operate from an existing tower. The existing tower height will be increased as authorized by the FAA in Aeronautical Study No. 2005-ASW-4861-OE.

Response to Paragraph 14 – Community Coverage

Figure 1 is a map which demonstrates that KHTT's proposed operation complies with the provisions of Section 73.315. Specifically, it has been determined that the proposed 70 dBu contour will encompass 100% of the area within the Muskogee limits.

Response to Paragraph 16

Figure 2 is a separation study from KHTT's proposed antenna location for the channel 295C operation. As shown, the proposed antenna location complies with the minimum distance separation requirements of Section 73.207 for Class C operation on channel 295 towards all existing, authorized and proposed stations and allotments with the exception of: (1) the pending petition for rule making to allot channel 295A to Boswell, Oklahoma; (2) KXIO on channel 295A at Clarksville, Arkansas; (3) KOSN on channel 298C1 at Ketchum, Oklahoma; and (4) a petition for rule making to allot channel 297A to Cushing, Oklahoma. Each short-spacing is addressed below.

The pending petition for rule making for channel 295A at Boswell requested the downgrade of KHTT to Class C0 status. However, the instant KHTT application will maintain KHTT's Class C status. Pursuant to Note 4 of Section 73.3573 of the Rules, upon grant of the instant KHTT application, the Boswell channel 295A petition for rule making will be dismissed.

The proposed KHTT operation is short-spaced by 9.21 kilometers to the licensed operation of KXIO on channel 295A at Clarksville, Arkansas (BLH-19910326KB). The licensed KXIO operation short-spaced KHTT's licensed operation (BLH-19820914AJ) under Section 73.215 by 9.83 kilometers. As the distance to KXIO's licensed operation is increased (i.e.

the short-spacing is decreased), KHTT is permitted to operate with maximum Class C facilities (ERP 100 kW/HAAT 600 m) towards KXIO's licensed operation.

The proposed KHTT operation is short-spaced by 2.52 kilometers to KOSN on channel 298C1 at Ketchum, Oklahoma (BMLED-20040928AJY). It is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with KOSN. Figure 3 is a map which depicts the protected and interfering contours for KHTT's proposed operation and for KOSN. As indicated on Figure 3, the proposed KHTT operation is not involved in contour overlap prohibited by Section 73.215. Therefore, the proposed KHTT facilities comply with the provisions of Section 73.215 with respect to the short-spacing with KOSN.[2]

The proposed KHTT operation is short-spaced by 0.85 kilometers to a pending petition for rule making for channel 297A at Cushing, Oklahoma. However, the Cushing channel 297A pending petition for rule making requested the downgrade of KRXO on channel 299C at Oklahoma City, Oklahoma to Class C0 status. Subsequently, KRXO obtained a construction permit which maintained its Class C status (BPH-20050216ABR). Therefore, pursuant to Note 4 of Section 73.3573 of the Rules, the grant of the KRXO Class C application would result in the dismissal of the Cushing channel 297A petition for rule making. Nevertheless, in an abundance of caution it is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with the Cushing channel 297A petition for rule making. Figure 3 is a map which depicts the protected and interfering contours for KHTT's proposed operation and for the Cushing channel 297A petition for rule making. As indicated on Figure 3, the proposed KHTT operation is not involved in contour overlap prohibited by Section 73.215. Therefore, the proposed KHTT facilities comply with the provisions of Section 73.215 with respect to the short-spacing with the Cushing channel 297A petition for rule making.[3]

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[2] The distance between KHTT's proposed transmitter location and KOSN's transmitter location (102.48 km) complies with the minimum distance separation requirement of Section 73.215(e) (99 km).

[3] The distance between KHTT's proposed transmitter location and the Cushing channel 297A allotment reference point (94.15 km) complies with the minimum distance separation requirement of Section 73.215(e) (89 km).

Environmental Considerations

The proposed KHTT facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with OST Bulletin No. 65, “Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation”. This Bulletin provides assistance in determining whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields.

The calculated power density at 2 meters above ground level at the base of the tower was calculated using the appropriate equation contained in the Bulletin. Figure 4 is vertical plane relative field pattern for the proposed ERI 8-bay, 1 wavelength bay spacing, nondirectional antenna. As shown on Figure 4, the maximum vertical relative field value towards the tower base (-60° to -90° elevation) is less than 0.32. Therefore, using a “worst-case” vertical relative field value of 0.32, the total ERP of 200 kW (H+V) and an antenna center of radiation height above ground level of 372 meters, the calculated power density at 2 meters above ground level at the base of the tower is 0.0050 milliwatt per square centimeter (mW/cm^2), or 2.51% of the Commission's recommended limit applicable to general population/uncontrolled exposure areas (0.2 mW/cm^2 for FM frequencies). Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the tower will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, procedures will be in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such procedures include reducing the average exposure by spreading out the work over a longer period of time, wearing “accepted” RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down.

Finally, it is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.

W. Jeffrey Reynolds

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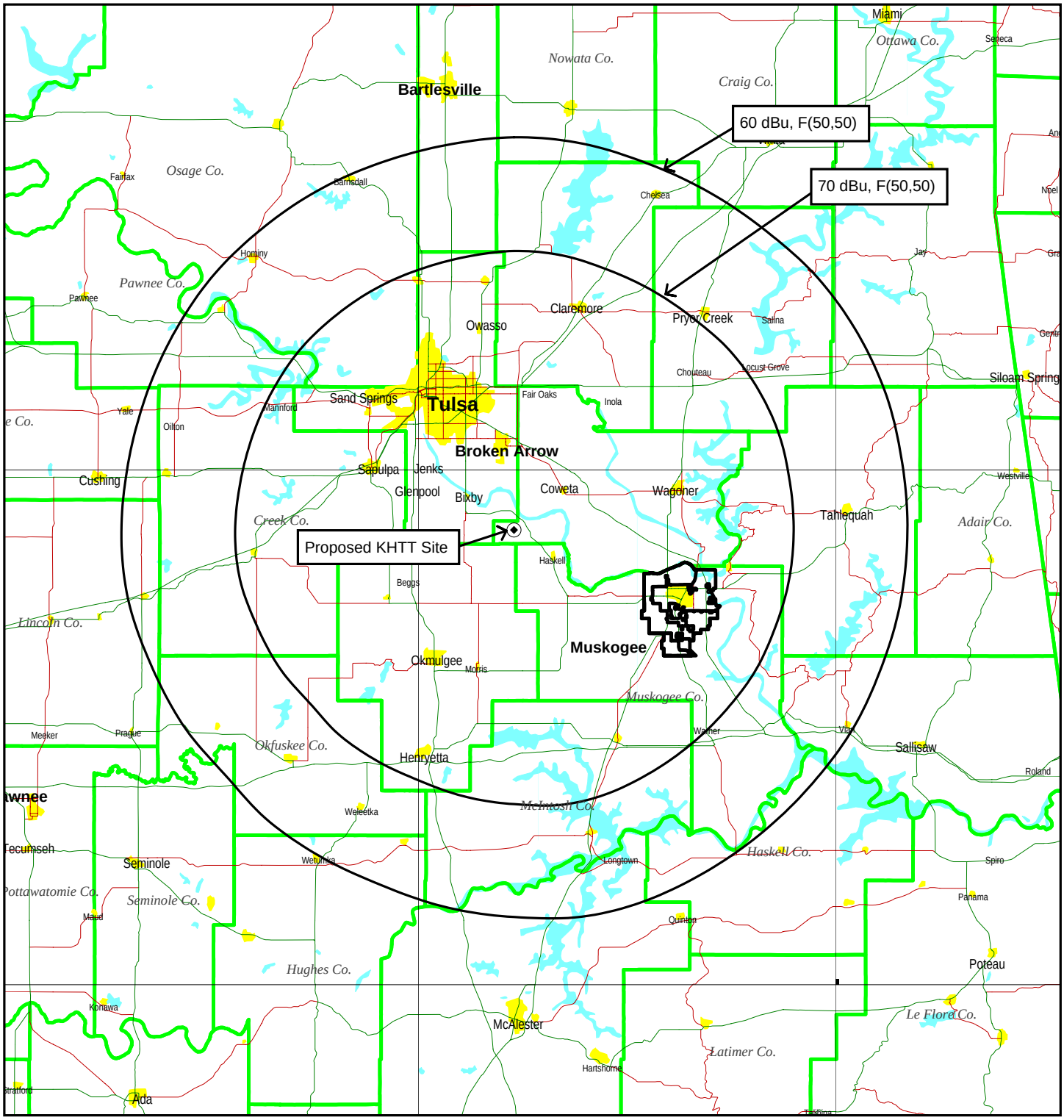
October 14, 2005



COMPLIANCE WITH SECTION 73.315

FM STATION KHTT
MUSKOGEE, OKLAHOMA
CH 295C 100 KW 462 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

CDBS FM SEPARATION STUDY

Job Title: Proposed KHTT, Ch. 295C, Muskogee, OK Separation Buffer: 32 km
Channel: 295 C Coordinates: 35-53-00 095-46-13

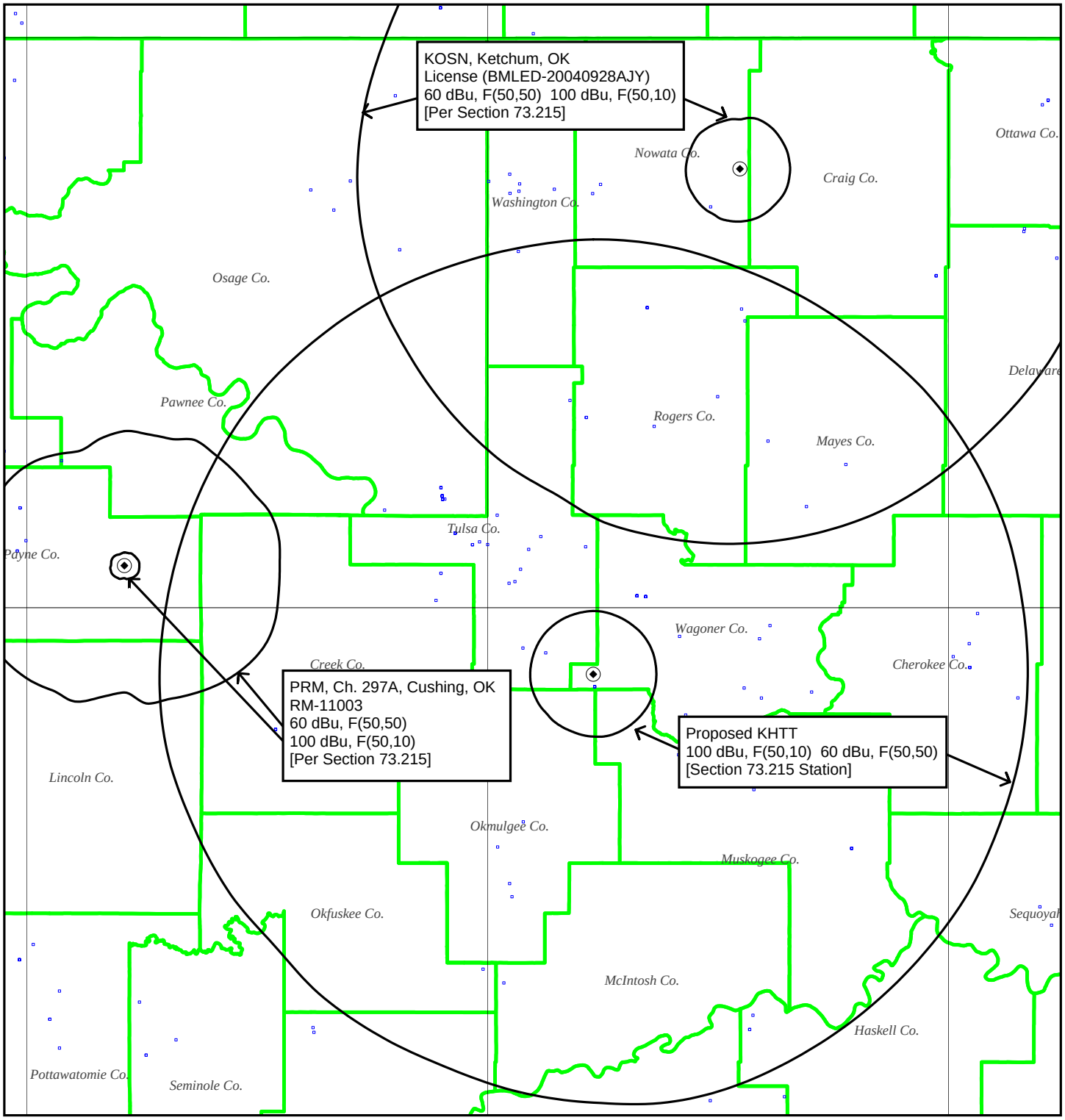
Call Id	City St Status	File Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km) 215	207
KBVA	BELLA VISTA	BLH	293 C2	37.000	N	36-18-21	N	67.9	127.14	96.0	105.0
23365	AR LIC C	19921005KE	106.5	173		094-27-29			22.14	Clear	
KTLS-FM	HOLDENVILLE	BLH	293 C3	25.000	N	34-54-50	Y	212.5	127.41	90.0	96.0
28053	OK LIC C	19970826KG	106.5	100		096-31-20			31.41	Clear	
KTUZ-FM	OKARCHE	BLH	294 C2	13.000	N	35-36-49	Y	261.6	192.44	176.0	188.0
14762	OK LIC C	20021018AAN	106.7	292		097-52-19			4.44	Close	
KHTT	MUSKOGEE	BLH	295 C	100.000	N	35-51-41	N	174.2	2.45		
55704	OK LIC C	19820914AJ	106.9	308		095-46-03					
	MUSKOGEE	RM	295 C	0.000		35-51-41		174.2	2.45		
	OK DEL C	11175	106.9			095-46-03					
	MUSKOGEE	RM	295 C0	0.000		35-51-41		174.2	2.45		
	OK ADD C	11175	106.9			095-46-03					
KXIO	CLARKSVILLE	BLH	295 A	6.000	Y	35-33-07	Y	99.1	216.79	203.0	226.0
29496	AR LIC C	19910326KB	106.9	34 13904		093-24-33			-9.21	**Short[1]**	
	BOSWELL	RM	295 A	0.000		33-55-00		180.3	218.18	203.0	226.0
	OK ADD C	11175	106.9			095-47-00			-7.82	**Short[2]**	
KMOQ	BAXTER SPRI	BMLH	296 A	6.000	N	37-07-34	N	34.3	167.79	142.0	165.0
64435	KS LIC C	19900326KA	107.1	91		094-42-12			2.79	Close	
	CUSHING	RM	297 A	0.000		36-04-26		283.3	94.15	89.0	95.0
	OK ADD C	11003	107.3			096-47-15			-0.85	**Short[3]**	
KOSN	KETCHUM	BMLED	298 C1	100.000	N	36-46-13	N	16.0	102.48	99.0	105.0
36969	OK LIC C	20040928AJY	107.5	299		095-27-07			-2.52	**Short[4]**	

[1] The licensed KXIO operation short-spaced KHTT's licensed operation (BLH-19820914AJ) under Section 73.215. As the distance to KXIO's licensed operation is increased (i.e. the short-spacing is decreased), KHTT is permitted to operate with maximum Class C facilities (ERP 100 kW/HAAT 600 m) towards KXIO's licensed operation.

[2] The pending petition for rule making for channel 295A at Boswell requested the downgrade of KHTT to Class C0 status. However, the instant KHTT application will maintain KHTT's Class C status. Pursuant to Note 4 of Section 73.3573 of the Rules, upon grant of the instant KHTT application, the Boswell channel 295A petition for rule making will be dismissed.

[3] The Cushing channel 297A pending petition for rule making requested the downgrade of KRXO on channel 299C at Oklahoma City, Oklahoma to Class C0 status. Subsequently, KRXO obtained a construction permit which maintained its Class C status (BPH-20050216ABR). Therefore, pursuant to Note 4 of Section 73.3573 of the Rules, the grant of the KRXO Class C application would result in the dismissal of the Cushing channel 297A petition for rule making. Nevertheless, in an abundance of caution it is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with the Cushing channel 297A petition for rule making. See Technical Narrative and Figure 3.

[4] It is proposed to utilize the contour protection provisions of Section 73.215 with respect to the short-spacing with KOSN. See Technical Narrative and Figure 3.



COMPLIANCE WITH SECTION 73.215

FM STATION KHTT
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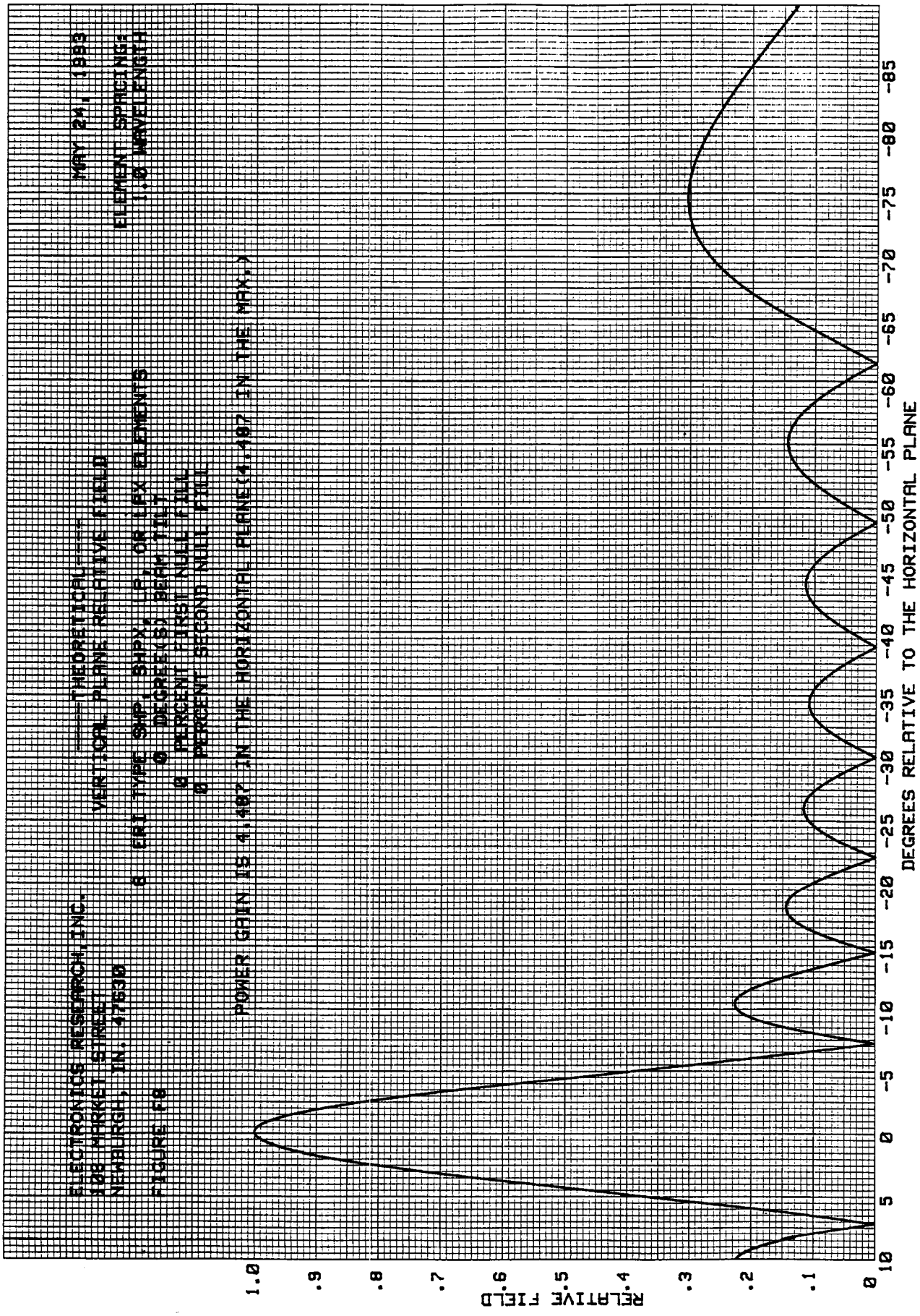
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4


ELECTRONICS RESEARCH,INC.
----THEORETICAL----
VERTICAL PLANE RELATIVE FIELD
ELEMENT SPACINGS
1.0 WAVELENGTH
MAY 24, 1993
108 MARKET STREET
NEWBURGH, IN. 47630
8 ERI TYPE SHP-SHPX-16 OR 18X ELEMENTS
@ DEGREES BEAM TILT
@ PERCENT FIRST SIDE LOBE FILL
@ PERCENT SECOND NULL FILL
FIGURE E8
POWER GAIN IS 4.487 IN THE HORIZONTAL PLANE(4.487 IN THE MAX.)
RELATIVE FIELD
1.0
.9
.8
.7
.6
.5
.4
.3
.2
.1
0
10 5 0 -5 -10 -15 -20 -25 -30 -35 -40 -45 -50 -55 -60 -65 -70 -75 -80 -85
DEGREES RELATIVE TO THE HORIZONTAL PLANE