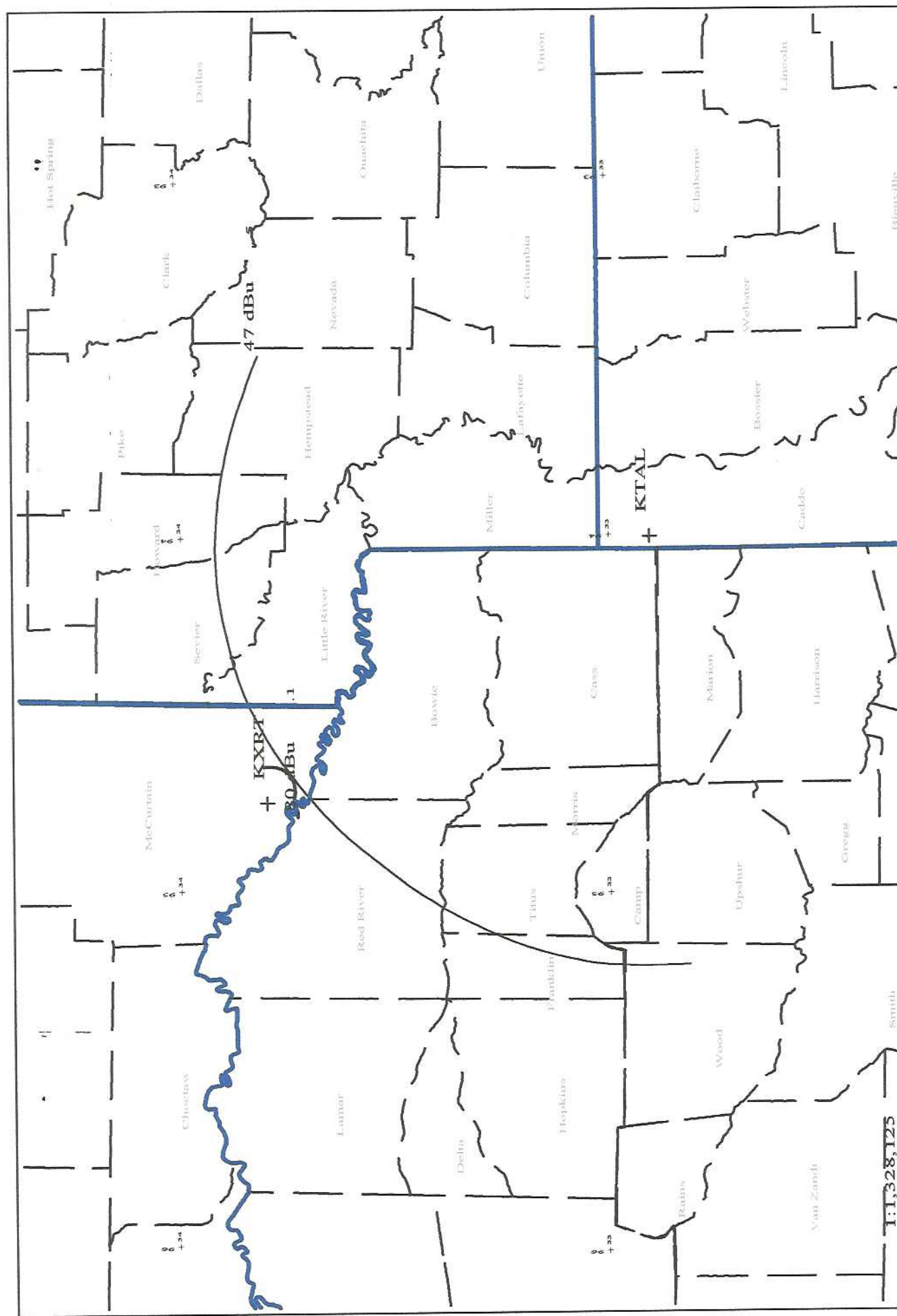


TV CHANNEL 6 INTERFERENCE STUDY

A study of the Commission's database reveals that the nearest channel 6 television facility located within the minimum distance specified by the Commission is KTAL and therefore must be considered. KTAL operates with 100kW at 552m COR AMSL. Coordinates for KTAL are: **32-54-12 94-00-23**.

The KRXT contours were plotted on a map and the affected contour was found to be the 47 dBu. The proposed interfering contour was determined by using the table in 47 CFR 73.599 (figure 2). The population within an area of interference using a maximum of 92kW would exceed the Commission's population limits of 3000 persons, therefore the applicant chooses vertical only polarized transmissions. CFR 47 section 73.525(4)(i), states the maximum permissible vertically polarized ERP will be the maximum horizontally polarized ERP permissible at the same proposed height, calculated without the adjustment for television receiving antenna directivity specified in paragraph (e)(1)(iii) of this section, multiplied by either : 40 if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more; or 10 if it does not. A horizontal ERP of 2.3kW($92,0000/40 = 2.3\text{kW}$) is used to calculate the area of interference. **No overlap of relevant contours occurs.**

Pursuant to Section 73.525, applicant proposes a vertical only E.R.P. of 92kw, the above tabulations indicate that a population of less than 3000 persons are affected by the proposed channel and as such the proposed is in compliance with 47 CFR 73.525 of the Commission's Rules.



KTAL vs KXRT
AFA - 07/03

KTAL 6 100kW 482M AMSL
KXRT 215C1 2.3kW 292M AMSL

Scale in km
0 10 20 30 40 50 60 70

1:1,328,125

07-28-2003 30 Sec. Terrain Data

KTAL

Channel = 6

Max ERP = 100 kW

RCAMSL = 482 M

N. Lat = 325412

W. Lng = 940023

KXRT

Channel = 215C1

Max ERP = 2.3 kW

RCAMSL = 292 M

N. Lat = 334803

W. Lng = 944502

Protected
47 dBuInterfering
80 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
295.0	100.0000	0395.4	111.0	210.7	001.5078	0189.5	061.2	46.2
296.0	100.0000	0395.2	111.0	211.0	001.5131	0189.4	059.4	46.8
297.0	100.0000	0395.1	110.9	211.1	001.5154	0189.4	057.5	47.6
298.0	100.0000	0394.7	110.9	211.2	001.5168	0189.3	055.5	48.3
299.0	100.0000	0394.0	110.8	211.3	001.5174	0189.3	053.6	49.0
300.0	100.0000	0393.2	110.8	211.3	001.5173	0189.3	051.7	49.8
301.0	100.0000	0392.4	110.7	211.2	001.5166	0189.3	049.8	50.5
302.0	100.0000	0392.0	110.7	211.2	001.5158	0189.3	047.8	51.3
303.0	100.0000	0391.9	110.7	211.1	001.5149	0189.4	045.9	52.1
304.0	100.0000	0391.9	110.7	211.0	001.5134	0189.4	044.0	52.9
305.0	100.0000	0391.7	110.6	210.8	001.5107	0189.4	042.0	53.7
306.0	100.0000	0391.1	110.6	210.5	001.5062	0189.5	040.1	54.6
307.0	100.0000	0390.5	110.5	210.2	001.5006	0189.6	038.2	55.5
308.0	100.0000	0389.9	110.5	209.7	001.4885	0189.8	036.3	56.4
309.0	100.0000	0389.8	110.5	209.2	001.4722	0190.0	034.4	57.3
310.0	100.0000	0390.4	110.5	208.7	001.4557	0190.2	032.5	58.3
311.0	100.0000	0391.7	110.6	208.2	001.4388	0190.3	030.6	59.3
312.0	100.0000	0393.0	110.8	207.5	001.4177	0190.5	028.7	60.4
313.0	100.0000	0394.2	110.9	206.7	001.3910	0190.7	026.8	61.5
314.0	100.0000	0395.4	111.0	205.7	001.3580	0190.9	024.9	62.7
315.0	100.0000	0396.7	111.1	204.4	001.3185	0190.8	023.1	64.0
316.0	100.0000	0398.1	111.2	202.8	001.2707	0190.7	021.2	65.2
317.0	100.0000	0399.1	111.3	200.8	001.2094	0190.9	019.4	66.4
318.0	100.0000	0399.9	111.4	198.2	001.1110	0191.0	017.7	67.5
319.0	100.0000	0400.6	111.4	194.9	000.9803	0190.9	016.0	68.4
320.0	100.0000	0401.4	111.5	190.8	000.8279	0191.5	014.4	69.0
321.0	100.0000	0402.1	111.6	185.5	000.7072	0192.0	012.9	70.3
322.0	100.0000	0403.0	111.6	178.9	000.5990	0192.7	011.6	71.6
323.0	100.0000	0403.9	111.7	170.6	000.5874	0193.5	010.5	73.3
324.0	100.0000	0405.0	111.8	160.5	000.7884	0192.7	009.6	76.0
325.0	100.0000	0406.1	111.9	149.0	001.0811	0190.9	009.2	78.1
326.0	100.0000	0407.1	112.0	136.8	001.5292	0190.4	009.2	79.6
327.0	100.0000	0408.2	112.1	125.2	001.9654	0186.3	009.6	79.7
328.0	100.0000	0409.5	112.2	114.9	002.2059	0180.7	010.4	78.6
329.0	100.0000	0411.0	112.3	106.4	002.3000	0175.9	011.5	76.7
330.0	100.0000	0412.5	112.5	099.6	002.3000	0174.8	012.9	74.7

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
331.0	100.0000	0413.9	112.6	094.2	002.3000	0172.5	014.4	72.6
332.0	100.0000	0415.0	112.7	090.1	002.3000	0172.3	016.0	71.2
333.0	100.0000	0415.9	112.8	086.9	002.3000	0171.6	017.7	69.7
334.0	100.0000	0416.7	112.9	084.4	002.3000	0171.0	019.5	68.2
335.0	100.0000	0417.3	112.9	082.4	002.3000	0170.6	021.4	66.7
336.0	100.0000	0417.9	113.0	080.9	002.3000	0170.1	023.2	65.3
337.0	100.0000	0418.7	113.0	079.6	002.3000	0169.8	025.1	63.9
338.0	100.0000	0419.5	113.1	078.5	002.3000	0169.5	027.1	62.6
339.0	100.0000	0420.1	113.2	077.7	002.3000	0169.3	029.0	61.3
340.0	100.0000	0420.2	113.2	077.2	002.3000	0169.1	030.9	60.1
341.0	100.0000	0420.3	113.2	076.7	002.3000	0169.0	032.9	59.1
342.0	100.0000	0420.3	113.2	076.4	002.3000	0168.9	034.9	58.0
343.0	100.0000	0420.2	113.2	076.2	002.3000	0168.8	036.8	57.0
344.0	100.0000	0419.6	113.1	076.1	002.3000	0168.8	038.8	56.1
345.0	100.0000	0419.0	113.1	076.1	002.3000	0168.8	040.8	55.1
346.0	100.0000	0418.5	113.0	076.1	002.3000	0168.8	042.7	54.3
347.0	100.0000	0418.4	113.0	076.1	002.3000	0168.8	044.7	53.4
348.0	100.0000	0418.5	113.0	076.2	002.3000	0168.8	046.7	52.6
349.0	100.0000	0418.7	113.0	076.2	002.3000	0168.8	048.7	51.8
350.0	100.0000	0419.0	113.1	076.3	002.3000	0168.8	050.6	51.0
351.0	100.0000	0419.1	113.1	076.5	002.3000	0168.9	052.6	50.3
352.0	100.0000	0419.0	113.1	076.6	002.3000	0168.9	054.6	49.5
353.0	100.0000	0419.0	113.1	076.8	002.3000	0169.0	056.5	48.8
354.0	100.0000	0418.5	113.0	077.1	002.3000	0169.1	058.5	48.1
355.0	100.0000	0418.0	113.0	077.4	002.3000	0169.2	060.4	47.4