

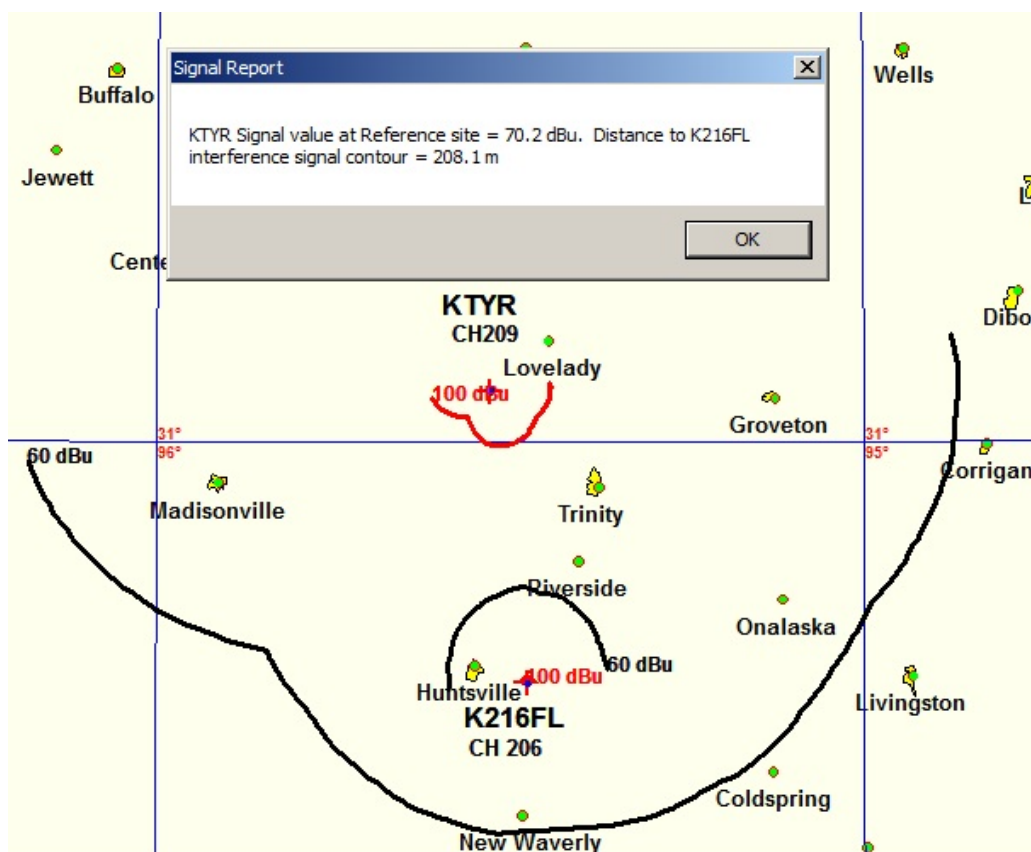
Figure 5

THIRD-ADJACENT CHANNEL CONTOUR OVERLAP WAIVER REQUEST  
(IF REQUIRED)

TO STATION KTYR (Ch. 209C1)  
TRINITY, TEXAS

***Basis for Waiver Request 47 CFR §74.1204(d)***  
***No population within predicted interference contour area***

Third-Adjacent Channel Station KTYR (Ch. 209C1), a licensed facility, is predicted to have a signal level of 70.2 dBu at the proposed site (the reference site). The D/U (desired to undesired) signal ratio is 40 dBu. Thus, the interfering signal level from this proposal is  $70.2 + 40 = 110.2$  dBu. The map below shows the calculated predicted signal level from KTYR at the proposed translator site, and the predicted interfering contour distance (maximum horizontal distance of 208.1 meters).



As shown in detail in Figure 5-2 the interference signal from this proposal remains at all times above the surface (ground) at an elevation of approximately 22 meters. There are no tall building, roof tops, or occupied spaces within the interference contour from this proposal. No interference is predicted to occur to a populated area.

Applicant believes that it has demonstrated that due to lack of population within the interference contour to KTYR, and that it is in compliance with the Commission's rules. Should a waiver of the rules with regards to the third-adjacent station contour overlap be necessary, it respectfully requests that said waiver be granted. A grant is in the public interest in that it has been demonstrated that no harm will occur and that no population is present within the interference contour radius of 208 meters from the tower.

FIGURE 5-2  
FROM K216FL FM TRANSLATOR  
TO KTYR CHANNEL 209C1

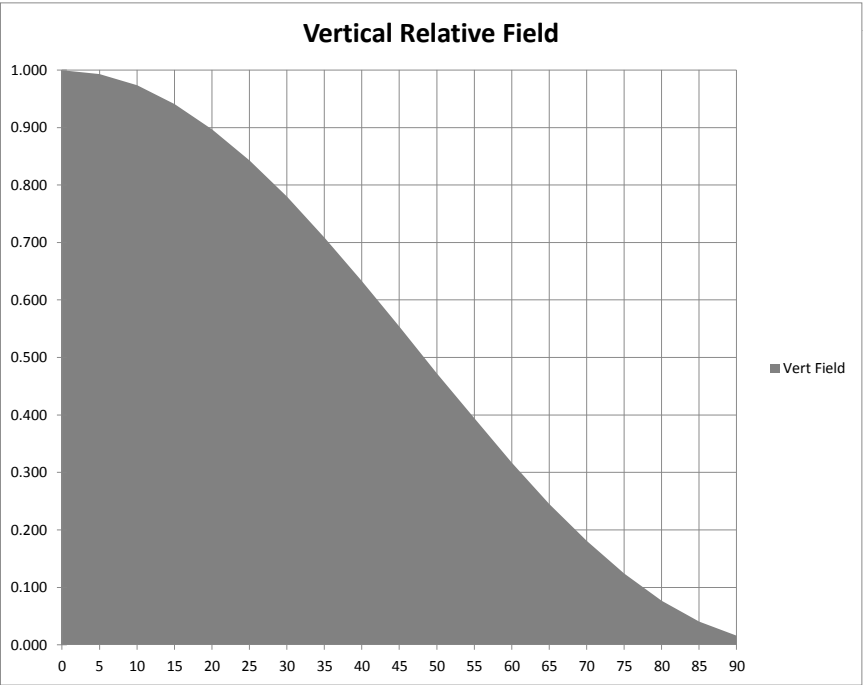
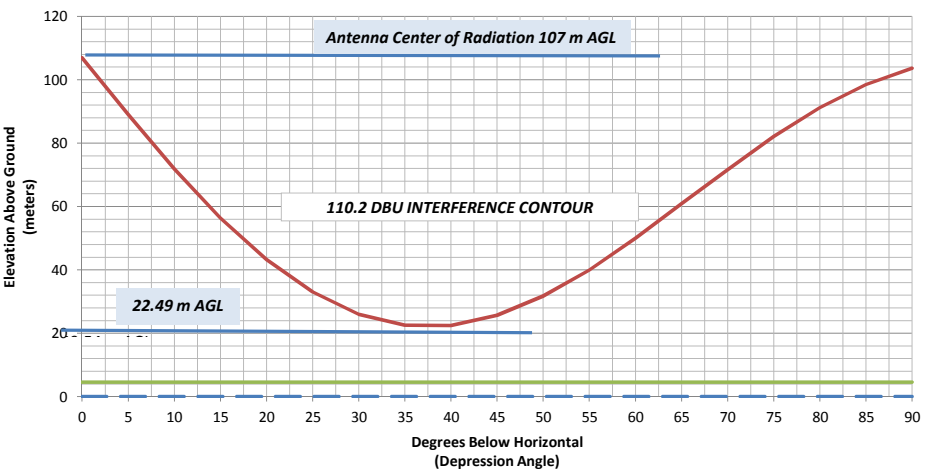
	<b>Antenna</b>
Manufacturer	SWR
Model	FM1
Number of Bays	1
Inter-Bay Spacing	1

Center of Radiation:	107	m AGL
Effective Radiated Power (ERP):	92	Watts
Interference Contour FS:	110.20	dBu
E Field Strength:	0.25293	V/m
Free Space Impedance:	377	Ohms
Power Density:	0.00016969	W/m^2
Maximum Free Space Distance:	207.71	meters

INCOMING		OUTGOING
Rx Level	D/U Ratio	IX Contour
70.20	40.00	110.20
		DBU

IX Contour Distance

DEPRESSION ANGLE	RELATIVE		ERP WATTS	IN METERS			
	FIELD	POWER		VECTOR LENGTH	HORIZONTAL	VERTICAL	AGL
0	1.0000	1.0000	92.00	207.71	207.71	0.00	107.00
5	0.9930	0.9860	90.72	206.26	205.47	17.98	89.02
10	0.9740	0.9487	87.28	202.31	199.24	35.13	71.87
15	0.9410	0.8855	81.46	195.46	188.80	50.59	56.41
20	0.8970	0.8046	74.02	186.32	175.08	63.72	43.28
25	0.8430	0.7106	65.38	175.10	158.69	74.00	33.00
30	0.7800	0.6084	55.97	162.01	140.31	81.01	25.99
35	0.7090	0.5027	46.25	147.27	120.63	84.47	22.53
40	0.6330	0.4007	36.86	131.48	100.72	84.51	22.49
45	0.5540	0.3069	28.24	115.07	81.37	81.37	25.63
50	0.4730	0.2237	20.58	98.25	63.15	75.26	31.74
55	0.3940	0.1552	14.28	81.84	46.94	67.04	39.96
60	0.3170	0.1005	9.24	65.84	32.92	57.02	49.98
65	0.2450	0.0600	5.52	50.89	21.51	46.12	60.88
70	0.1810	0.0328	3.01	37.60	12.86	35.33	71.67
75	0.1240	0.0154	1.41	25.76	6.67	24.88	82.12
80	0.0770	0.0059	0.55	15.99	2.78	15.75	91.25
85	0.0410	0.0017	0.15	8.52	0.74	8.48	98.52
90	0.0160	0.0003	0.02	3.32	0.00	3.32	103.68



GOOGLE EARTH IMAGE OF 208 METER RADIUS (110.2 DBU INTERFERENCE CONTOUR) FROM TOWER SITE NO TALL BUILDINGS WITHIN AREA - CONTOUR REMAINS 22 METERS OR GREATER ABOVE ALL POINTS OF EARTH SURFACE - THERE ARE NO STRUCTURES OR ROOFTOPS THAT PENETRATES VERTICALLY INTO THE INTERFERENCE CONTOUR AREAS. IMAGE DATE 1/18/2020

