

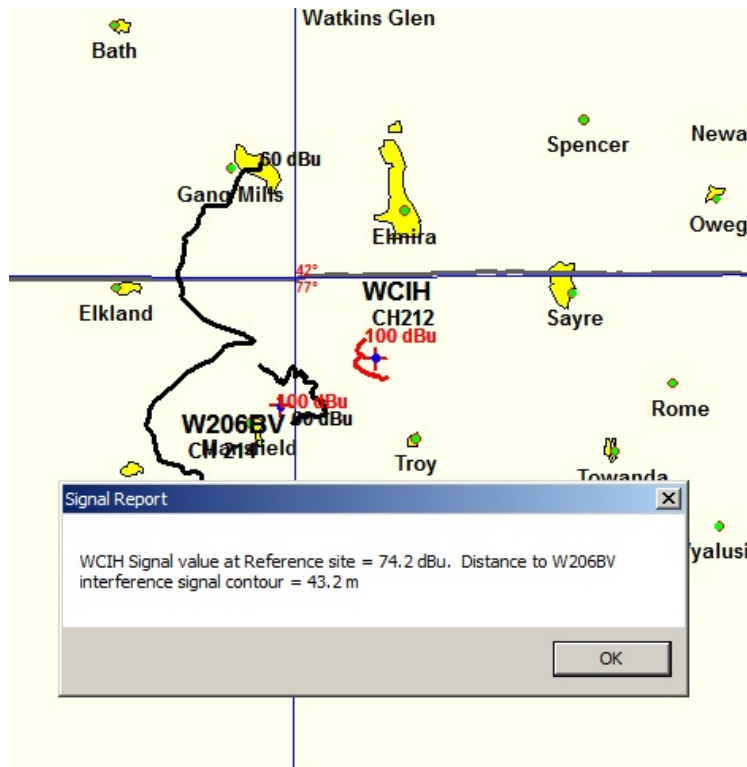
Figure 5

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

TO STATION WCIH (Ch. 212B1)  
RIDGEBURY, PA

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

Second-Adjacent Channel Station WCIH (Ch. 212B1), a licensed facility, is predicted to have a signal level of 74.2 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  $74.2 + 40 = 114.2$  dBu. The map below shows the calculated predicted signal level from WCIH at the proposed translator site, and the predicted interfering contour distance (maximum horizontal distance of 43.2 meters).



As shown in detail in Figure 5-2 the interference signal from this proposal remains at all times within the site boundary and above ground level. There is no population ( only a farm field and restricted access communications site) within the predicted interference contour.

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 WCIH, and that it is in compliance with the Commission's rules.

Should a waiver of the rules with regards to the second-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 43.2 meters from the tower.

FIGURE 5-2  
FROM W206BV FM TRANSLATOR  
TO WCIH CHANNEL 212B1

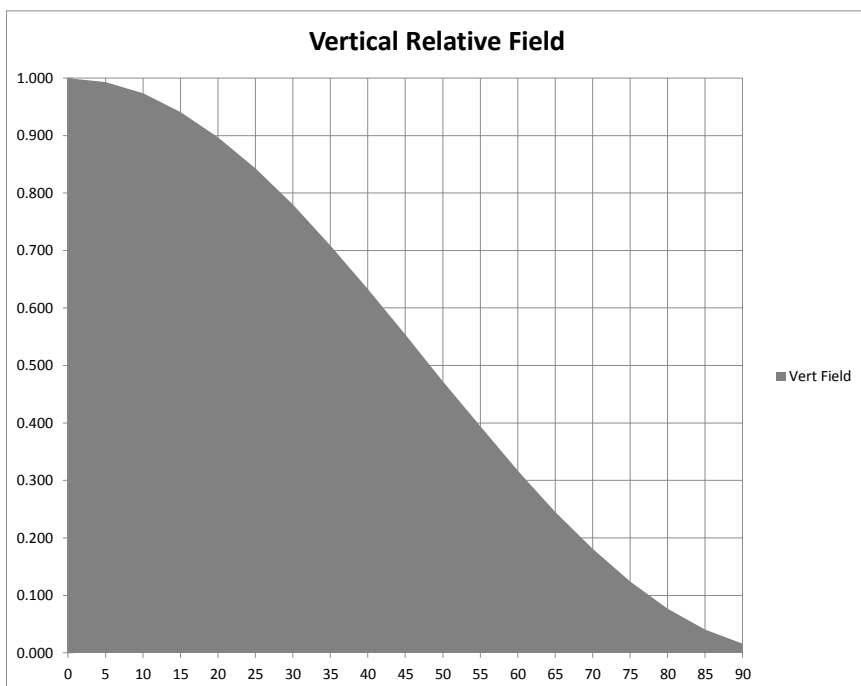
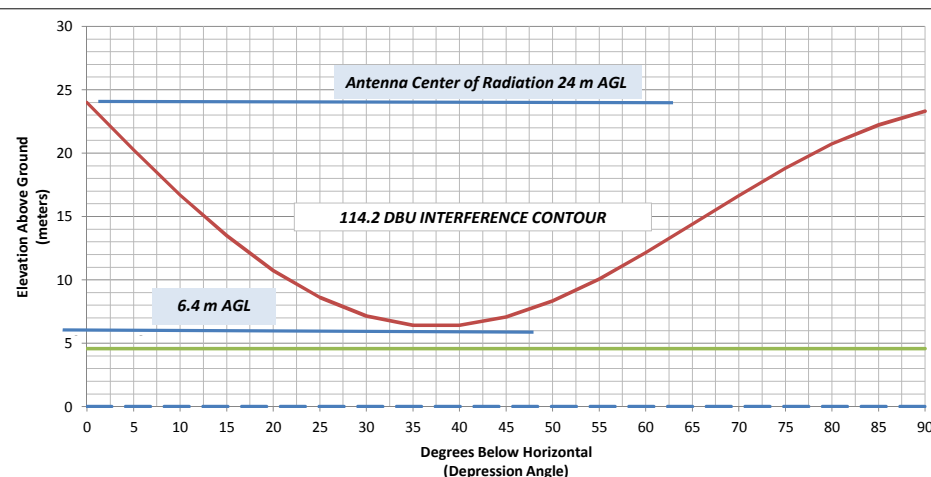
Antenna	
Manufacturer	SWR
Model	FM1
Number of Bays	1
Inter-Bay Spacing	1

Center of Radiation:	24	m AGL
Effective Radiated Power (ERP):	10	Watts
Interference Contour FS:	114.20	dBu
E Field Strength:	0.40087	V/m
Free Space Impedance:	377	Ohms
Power Density:	0.00042624	W/m^2
Maximum Free Space Distance:	43.21	meters

INCOMING		OUTGOING
Rx Level	D/U Ratio	IX Contour
74.20	40.00	114.20
		DBU

IX Contour Distance

DEPRESSION ANGLE	RELATIVE		ERP WATTS	IN METERS			
	FIELD	POWER		VECTOR LENGTH	HORIZONTAL	VERTICAL	AGL
0	1.0000	1.0000	10.00	43.21	43.21	0.00	24.00
5	0.9930	0.9860	9.86	42.91	42.74	3.74	20.26
10	0.9740	0.9487	9.49	42.08	41.45	7.31	16.69
15	0.9410	0.8855	8.85	40.66	39.27	10.52	13.48
20	0.8970	0.8046	8.05	38.76	36.42	13.26	10.74
25	0.8430	0.7106	7.11	36.42	33.01	15.39	8.61
30	0.7800	0.6084	6.08	33.70	29.19	16.85	7.15
35	0.7090	0.5027	5.03	30.63	25.09	17.57	6.43
40	0.6330	0.4007	4.01	27.35	20.95	17.58	6.42
45	0.5540	0.3069	3.07	23.94	16.93	16.93	7.07
50	0.4730	0.2237	2.24	20.44	13.14	15.66	8.34
55	0.3940	0.1552	1.55	17.02	9.76	13.95	10.05
60	0.3170	0.1005	1.00	13.70	6.85	11.86	12.14
65	0.2450	0.0600	0.60	10.59	4.47	9.59	14.41
70	0.1810	0.0328	0.33	7.82	2.67	7.35	16.65
75	0.1240	0.0154	0.15	5.36	1.39	5.18	18.82
80	0.0770	0.0059	0.06	3.33	0.58	3.28	20.72
85	0.0410	0.0017	0.02	1.77	0.15	1.76	22.24
90	0.0160	0.0003	0.00	0.69	0.00	0.69	23.31



GOOGLE EARTH IMAGE OF 44 METER RADIUS (114.2 DBU INTERFERENCE CONTOUR) FROM TOWER SITE NO TALL BUILDINGS WITHIN AREA - CONTOUR REMAINS 6 METERS OR GREATER ABOVE ALL POINTS OF EARTH SURFACE - THERE ARE NO STRUCTURES OR ROOFTOPS THAT PENETRATES VERTICALLY INTO THE INTERFERENCE CONTOUR AREAS. GOOGLE EARTH IMAGE DATE 09/04/2016

