

Compliance with C.F.R. 74.1204

The proposed FM Translator operation on channel 247 is located within the protected 60dBu contour of second adjacent channel station WCZX, channel 249A, Hyde Park, NY and second adjacent channel station WRRB, 245A, Arlington, NY. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

WCZX F(50/50) contour at proposed site: 63.1dBu

WRRB F(50/50) contour at proposed site: 62.9dBu

Taking into account the worst-case scenario of 62.9dbu results in an interfering contour of 102.9dbu. The proposed Scala CA2 array will be operating with an effective radiated power of 52 watts in the 110 degree lobe and 99 watts in the 290 degree lobe. The 102.9dbu(F50-10) contour has been plotted on a Google Earth map based on this antenna pattern and these power levels. Three potentially occupied structures are shown to be inside the 102.9dbu contour.

Exhibits 2-A and 2-B demonstrate the interfering distances and elevation of the interfering contour above or below ground level. These studies are based on the vertical elevation patterns of the proposed antennas, the height above ground level of 6 meters, and the associated power levels of 52 watts and 99 watts. The interfering contour distance in the 110 degree lobe is 362 meters. The interfering contour distance in the 290 degree lobe is 500 meters.

As shown on the Google Earth map, the 290 degree lobe does not extend to any potentially occupied structures. The 110 degree lobe extends to potentially occupied structures as labelled on the Google Earth Map. These structures are at distances of 290-320 meters removed from the transmit location. Taking into account exhibit 2-A, the interfering contour height above ground at the 290-320 meter distances is no greater than -140.256 meters. The site elevation for the W247CW proposed operation is 201 meters. The site elevation at the location of the structures is 55 meters which allows for 146 meters of headroom. The interfering contour over the potentially occupied structures falls no greater than 140.256 meters below ground level which is 5.744 meters above ground level at the potentially occupied structures.

Therefore a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference is respectfully requested.

EXHIBIT 2-A
74.1204(d) Showing
W247CW
Poughkeepsie, NY

ERP (kw): 0.052
Height of Antenna above Ground (m): 6
Translator's IX Contour: 102.9
Antenna Type: Scala CA2-V

Depression Angle from Horizon	Antenna Relative Field	ERP (kw) from the Antenna	Dist. To IX Contour (m)	Height IX Contour Above Ground (m)
0	1.000	0.0520	362.2444	6.000
5	0.990	0.0510	358.6219	-25.256
10	0.978	0.0497	354.1301	-55.494
15	0.958	0.0477	346.8490	-83.771
20	0.915	0.0435	331.4536	-107.364
25	0.865	0.0389	313.3414	-126.424
30	0.808	0.0339	292.5123	-140.256
35	0.745	0.0289	269.8721	-148.792
40	0.675	0.0237	244.5150	-151.171
45	0.595	0.0184	215.5354	-146.407
50	0.510	0.0135	184.7446	-135.523
55	0.430	0.0096	155.7651	-121.595
60	0.345	0.0062	124.9743	-102.231
65	0.265	0.0037	95.9948	-81.001
70	0.190	0.0019	68.8264	-58.676
75	0.125	0.0008	45.2805	-37.738
80	0.075	0.0003	27.1683	-20.756
85	0.055	0.0002	19.9234	-13.848
90	0.050	0.0001	18.1122	-12.112

EXHIBIT 2-B
74.1204(d) Showing
W247CW
Poughkeepsie, NY

ERP (kw): 0.099
Height of Antenna above Ground (m): 6
Translator's IX Contour: 102.9
Antenna Type: Scala CA2-V

Depression Angle from Horizon	Antenna Relative Field	ERP (kw) from the Antenna	Dist. To IX Contour (m)	Height IX Contour Above Ground (m)
0	1.000	0.0990	499.8246	6.000
5	0.990	0.0970	494.8263	-37.127
10	0.978	0.0946	488.6285	-78.849
15	0.958	0.0908	478.5820	-117.866
20	0.915	0.0829	457.3395	-150.419
25	0.865	0.0741	432.3482	-176.718
30	0.808	0.0646	403.6083	-195.804
35	0.745	0.0549	372.3693	-207.582
40	0.675	0.0451	337.3816	-210.865
45	0.595	0.0350	297.3956	-204.290
50	0.510	0.0257	254.9105	-189.273
55	0.430	0.0183	214.9246	-170.056
60	0.345	0.0118	172.4395	-143.337
65	0.265	0.0070	132.4535	-114.044
70	0.190	0.0036	94.9667	-83.239
75	0.125	0.0015	62.4781	-54.349
80	0.075	0.0006	37.4868	-30.917
85	0.055	0.0003	27.4904	-21.386
90	0.050	0.0002	24.9912	-18.991

W247CW Poughkeepsie, NY

Legend

Red Contours - 102.9dbu(F50-10)

W247CW.P

Potential Occupied Structures

