

Technical Narrative for Educational Public Radio, Inc.
Channel Allocation Study
WAZQ, Minor Modification, 90 kW, 88.3 MHz, Class C1

Minor Change Status of Instant Application

The applicant proposes to relocate the tower site to the indicated coordinates at a height of 76 meters above ground level. From the attached exhibit map showing the f(50,50) 60 dBu contour of the existing construction permit and the f(50,50) 60 dBu contour of the proposed facility, it is clear that there is significant overlap of the signals. In addition no change in channel is proposed. This is classified as a minor change according to current FCC regulations.

Allocation Matters

A channel study was performed and the results are attached showing distance to contours of each affected application, permit or licensed facility within a minimum threshold. The facilities most affected by the modification application with corresponding contours are:

WIRP (LIC), Pennsuco, FL, 88.3 MHz, Class A, 6000 watts at 86 meters HAAT.
WFML (LIC), Florida City, FL, 88.5 MHz, Class C3, 7700 watts at 52 meters HAAT.

Attached is a map showing the proposed modification to WAZQ service and interfering contours and the corresponding service and interfering contours of the two stations listed here. As can be seen by the map attached, there are no areas of overlap from the proposed modification and any station classified as most affected by the instant proposal. No IF channels were found at even twice the distance for any applicable station with respect to the applicant's channel and 53 and 54 channels removed from the applicants application. As a result, this application complies in every respect with the FCC regulations related to interference to other FM stations.

Community of License Coverage

The proposed facility places a service contour over a majority of land area of the community of license, Key West, FL.

Callsign : WAZQ
Coordinates : 24-40-28.0 N, 81-21-40.0 W
Frequency (MHz): 88.30000
HAAT (m): 77.00 AMSL (m): 77.00
Elevation (m): 1.00 Tower AGL (m): 77.00
ERP (w): 90,000
City/State : KEY WEST, FL

Contour type : F(50,50)
 Signal strength : 60.000 dBu
 Area covered : 6407.7 sq. km
 Population covered: 46,709 persons
 Contour HAAT (m) : 77.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	77	0	45.2	90	77	0	45.2	180	77	0	45.2	270	77	0	45.2
5	77	0	45.2	95	77	0	45.2	185	77	0	45.2	275	77	0	45.2
10	77	0	45.2	100	77	0	45.2	190	77	0	45.2	280	77	0	45.2
15	77	0	45.2	105	77	0	45.2	195	77	0	45.2	285	77	0	45.2
20	77	0	45.2	110	77	0	45.2	200	77	0	45.2	290	77	0	45.2
25	77	0	45.2	115	77	0	45.2	205	77	0	45.2	295	77	0	45.2
30	77	0	45.2	120	77	0	45.2	210	77	0	45.2	300	77	0	45.2
35	77	0	45.2	125	77	0	45.2	215	77	0	45.2	305	77	0	45.2
40	77	0	45.2	130	77	0	45.2	220	77	0	45.2	310	77	0	45.2
45	77	0	45.2	135	77	0	45.2	225	77	0	45.2	315	77	0	45.2
50	77	0	45.2	140	77	0	45.2	230	77	0	45.2	320	77	0	45.2
55	77	0	45.2	145	77	0	45.2	235	77	0	45.2	325	77	0	45.2
60	77	0	45.2	150	77	0	45.2	240	77	0	45.2	330	77	0	45.2
65	77	0	45.2	155	77	0	45.2	245	77	0	45.2	335	77	0	45.2
70	77	0	45.2	160	77	0	45.2	250	77	0	45.2	340	77	0	45.2
75	77	0	45.2	165	77	0	45.2	255	77	0	45.2	345	77	0	45.2
80	77	0	45.2	170	77	0	45.2	260	77	0	45.2	350	77	0	45.2
85	77	0	45.2	175	77	0	45.19	265	77	0	45.2	355	77	0	45.2

Contour type : F(50,10)
 Signal strength : 40.000 dBu
 Contour HAAT (m) : 77.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	77	0	140	90	77	0	140	180	77	0	45.2	270	77	0	140
5	77	0	140	95	77	0	140	185	77	0	45.2	275	77	0	140
10	77	0	140	100	77	0	140	190	77	0	45.2	280	77	0	140
15	77	0	140	105	77	0	140	195	77	0	45.2	285	77	0	140
20	77	0	140	110	77	0	140	200	77	0	45.2	290	77	0	140
25	77	0	140	115	77	0	140	205	77	0	45.2	295	77	0	140
30	77	0	140	120	77	0	140	210	77	0	45.2	300	77	0	140
35	77	0	140	125	77	0	140	215	77	0	45.2	305	77	0	140
40	77	0	140	130	77	0	140	220	77	0	45.2	310	77	0	140
45	77	0	140	135	77	0	140	225	77	0	45.2	315	77	0	140
50	77	0	140	140	77	0	140	230	77	0	45.2	320	77	0	140

55	77	0	140	145	77	0	140	235	77	0	45.2	325	77	0	140
60	77	0	140	150	77	0	140	240	77	0	45.2	330	77	0	140
65	77	0	140	155	77	0	140	245	77	0	45.2	335	77	0	140
70	77	0	140	160	77	0	140	250	77	0	45.2	340	77	0	140
75	77	0	140	165	77	0	140	255	77	0	45.2	345	77	0	140
80	77	0	140	170	77	0	140	260	77	0	45.2	350	77	0	140
85	77	0	140	175	77	0	140	265	77	0	45.2	355	77	0	140

Contour type : F(50,10)

Signal strength : 54.000 dBu

Contour HAAT (m) : 77.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	77	0	74.1	90	77	0	74.1	180	77	0	74.1	270	77	0	74.1
5	77	0	74.1	95	77	0	74.1	185	77	0	74.1	275	77	0	74.1
10	77	0	74.1	100	77	0	74.1	190	77	0	74.1	280	77	0	74.1
15	77	0	74.1	105	77	0	74.1	195	77	0	74.1	285	77	0	74.1
20	77	0	74.1	110	77	0	74.1	200	77	0	74.1	290	77	0	74.1
25	77	0	74.1	115	77	0	74.1	205	77	0	74.1	295	77	0	74.1
30	77	0	74.1	120	77	0	74.1	210	77	0	74.1	300	77	0	74.1
35	77	0	74.1	125	77	0	74.1	215	77	0	74.1	305	77	0	74.1
40	77	0	74.1	130	77	0	74.1	220	77	0	74.1	310	77	0	74.1
45	77	0	74.1	135	77	0	74.1	225	77	0	74.1	315	77	0	74.1
50	77	0	74.1	140	77	0	74.1	230	77	0	74.1	320	77	0	74.1
55	77	0	74.1	145	77	0	74.1	235	77	0	74.1	325	77	0	74.1
60	77	0	74.1	150	77	0	74.1	240	77	0	74.1	330	77	0	74.1
65	77	0	74.1	155	77	0	74.1	245	77	0	74.1	335	77	0	74.1
70	77	0	74.1	160	77	0	74.1	250	77	0	74.1	340	77	0	74.1
75	77	0	74.1	165	77	0	74.1	255	77	0	74.1	345	77	0	74.1
80	77	0	74.1	170	77	0	74.1	260	77	0	74.1	350	77	0	74.1
85	77	0	74.1	175	77	0	74.1	265	77	0	74.1	355	77	0	74.1

Callsign : WMFL
Coordinates : 25-05-50.0 N, 80-26-12.0 W
Frequency (MHz): 88.50000
HAAT (m): 41.00 AMSL (m): 41.00
Elevation (m): 2.00 Tower AGL (m): 39.00
ERP (w): 8000
City/State : FLORIDA CITY, FL
Distance (km): 104
Licensee : FAMILY STATIONS, INC.

Contour type : F(50,50)
 Signal strength : 60.000 dBu
 Area covered : 1321.100 sq. km
 Population covered: 83,719 persons
 Contour HAAT (m) : 52.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	52	0	22.2	90	52	0	21.2	180	52	0	19.3	270	52	0	22.2
5	52	0	22.2	95	52	0	20.5	185	52	0	19.7	275	52	0	22.2
10	52	0	22.2	100	52	0	19.7	190	52	0	20	280	52	0	22.2
15	52	0	22.2	105	52	0	18.8	195	52	0	20	285	52	0	22.2
20	52	0	22.2	110	52	0	17.7	200	52	0	20	290	52	0	22.2
25	52	0	22.2	115	52	0	16.7	205	52	0	20	295	52	0	22.2
30	52	0	22.2	120	52	0	15.6	210	52	0	20	300	52	0	22.2
35	52	0	22.2	125	52	0	14.7	215	52	0	20	305	52	0	22.2
40	52	0	22.2	130	52	0	13.9	220	52	0	20	310	52	0	22.2
45	52	0	22.2	135	52	0	13.9	225	52	0	21.2	315	52	0	22.2
50	52	0	22.2	140	52	0	13.9	230	52	0	22.2	320	52	0	22.2
55	52	0	22.2	145	52	0	13.9	235	52	0	22.2	325	52	0	22.2
60	52	0	22.2	150	52	0	13.9	240	52	0	22.2	330	52	0	22.2
65	52	0	22.2	155	52	0	14.7	245	52	0	22.2	335	52	0	21.1
70	52	0	22.2	160	52	0	15.6	250	52	0	22.2	340	52	0	19.9
75	52	0	22.2	165	52	0	16.4	255	52	0	22.2	345	52	0	19.9
80	52	0	22.2	170	52	0	17.2	260	52	0	22.2	350	52	0	19.9
85	52	0	21.7	175	52	0	18.3	265	52	0	22.2	355	52	0	21.1

Contour type : F(50,10)
 Signal strength : 54.000 dBu
 Contour HAAT (m) : 52.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	52	0	33.6	90	52	0	31.5	180	52	0	28.4	270	52	0	33.6
5	52	0	33.6	95	52	0	30.1	185	52	0	28.9	275	52	0	33.6
10	52	0	33.6	100	52	0	29	190	52	0	29.3	280	52	0	33.6
15	52	0	33.6	105	52	0	27.5	195	52	0	29.3	285	52	0	33.6
20	52	0	33.6	110	52	0	26	200	52	0	29.3	290	52	0	33.6
25	52	0	33.6	115	52	0	24.6	205	52	0	29.3	295	52	0	33.6
30	52	0	33.6	120	52	0	23.2	210	52	0	29.3	300	52	0	33.6
35	52	0	33.6	125	52	0	22	215	52	0	29.3	305	52	0	33.6
40	52	0	33.6	130	52	0	20.7	220	52	0	29.3	310	52	0	33.6

45	52	0	33.6	135	52	0	20.7	225	52	0	31.5	315	52	0	33.6
50	52	0	33.6	140	52	0	20.7	230	52	0	33.6	320	52	0	33.6
55	52	0	33.6	145	52	0	20.7	235	52	0	33.6	325	52	0	33.6
60	52	0	33.6	150	52	0	20.7	240	52	0	33.6	330	52	0	33.6
65	52	0	33.6	155	52	0	22	245	52	0	33.6	335	52	0	31.4
70	52	0	33.6	160	52	0	23.2	250	52	0	33.6	340	52	0	29.2
75	52	0	33.6	165	52	0	24.3	255	52	0	33.6	345	52	0	29.2
80	52	0	33.6	170	52	0	25.4	260	52	0	33.6	350	52	0	29.2
85	52	0	32.6	175	52	0	27	265	52	0	33.6	355	52	0	31.4

Callsign : WIRP

Coordinates : 25-52-24.0 N, 80-28-59.0 W

Frequency (MHz): 88.30000

HAAT (m): 86.00 AMSL (m): 86.00

Elevation (m): 3.00 Tower AGL (m): 83.00

ERP (w): 6000

City/State : PENNSUCO, FL

Distance (km): 159

Licensee : CENTRO INTERNACIONAL APOSTOLICO, INC.

Contour type : F(50,50)

Signal strength : 60.000 dBu

Area covered : 1453.800 sq. km

Population covered: 664,656 persons

Contour HAAT (m) : 86.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	86	0	20.9	90	86	0	26.4	180	86	0	14.2	270	86	0	25.6
5	86	0	20.1	95	86	0	25.3	185	86	0	14.4	275	86	0	25.9
10	86	0	19.3	100	86	0	24.2	190	86	0	14.6	280	86	0	26.2
15	86	0	18.7	105	86	0	23.5	195	86	0	14.8	285	86	0	26.3
20	86	0	18	110	86	0	22.7	200	86	0	15.1	290	86	0	26.4
25	86	0	17.9	115	86	0	21.7	205	86	0	15.8	295	86	0	26.4
30	86	0	17.8	120	86	0	20.6	210	86	0	16.6	300	86	0	26.4
35	86	0	17.9	125	86	0	19.9	215	86	0	17.6	305	86	0	26.3
40	86	0	18	130	86	0	29	220	86	0	18.5	310	86	0	26.2
45	86	0	18.6	135	86	0	18.2	225	86	0	19.2	315	86	0	25.8
50	86	0	20.3	140	86	0	17.7	230	86	0	20	320	86	0	25.4
55	86	0	21.5	145	86	0	17	235	86	0	21.2	325	86	0	25
60	86	0	22.6	150	86	0	16.4	240	86	0	22.3	330	86	0	24.5
65	86	0	23.9	155	86	0	16.9	245	86	0	23.1	335	86	0	24
70	86	0	25.1	160	86	0	15.4	250	86	0	23.8	340	86	0	23.5
75	86	0	25.7	165	86	0	15.1	255	86	0	24.4	345	86	0	22.9
80	86	0	26.4	170	86	0	14.8	260	86	0	24.9	350	86	0	22.2
85	86	0	26.4	175	86	0	14.5	265	86	0	25.3	355	86	0	21.6

Contour type : F(50,10)
Signal strength : 40.000 dBu
Contour HAAT (m) : 86.0

Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist	Brng	HAAT	AT	Dist
0	86	0	68.5	90	86	0	84.2	180	86	0	49.4	270	86	0	82.2
5	86	0	66.1	95	86	0	81.4	185	86	0	50	275	86	0	83
10	86	0	63.7	100	86	0	78.3	190	86	0	50.5	280	86	0	83.7
15	86	0	61.9	105	86	0	76.1	195	86	0	51.4	285	86	0	84
20	86	0	60	110	86	0	73.9	200	86	0	56.2	290	86	0	84.2
25	86	0	59.7	115	86	0	70.8	205	86	0	54.2	295	86	0	84.2
30	86	0	59.4	120	86	0	67.6	210	86	0	56.1	300	86	0	84.2
35	86	0	59.7	125	86	0	65.3	215	86	0	58.7	305	86	0	84
40	86	0	60	130	86	0	62.9	220	86	0	61.2	310	86	0	83.7
45	86	0	61.8	135	86	0	60.5	225	86	0	63.4	315	86	0	82.8
50	86	0	66.5	140	86	0	59	230	86	0	65.5	320	86	0	81.7
55	86	0	70.2	145	86	0	57.4	235	86	0	69.2	325	86	0	80.3
60	86	0	73.5	150	86	0	55.8	240	86	0	72.5	330	86	0	78.9
65	86	0	77.3	155	86	0	54.4	245	86	0	74.8	335	86	0	77.5
70	86	0	80.8	160	86	0	53	250	86	0	77.1	340	86	0	76.1
75	86	0	82.5	165	86	0	86.1	255	86	0	78.6	345	86	0	74.2
80	86	0	84.2	170	86	0	51.2	260	86	0	80.1	350	86	0	72.3
85	86	0	84.2	175	86	0	50.3	265	86	0	81.2	355	86	0	70.4