

MINOR CHANGE REQUEST

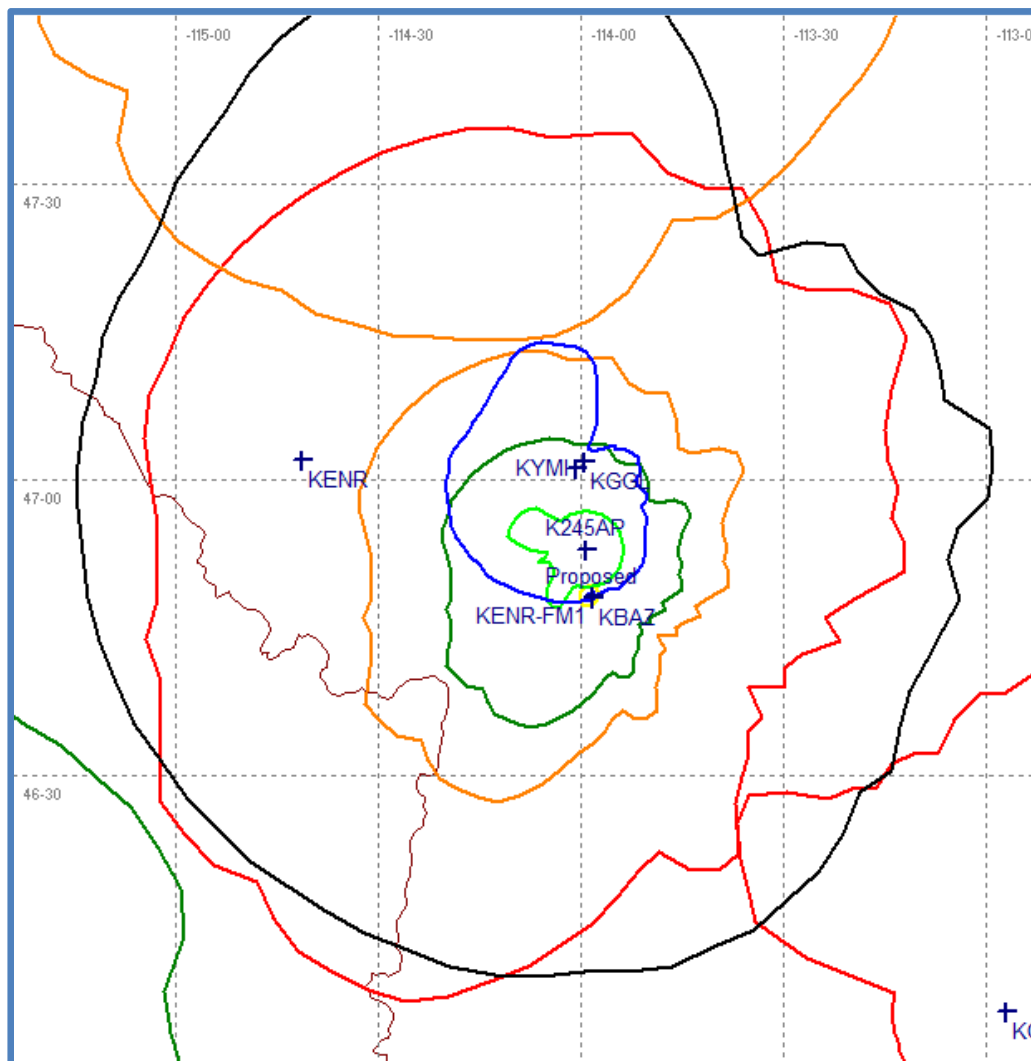
Facility ID: 143897

Translator K245AP Missoula MT

License: BLFT- 20070621AQO

This instant request proposes to modify this translator license to a new location, height and Effective Radiated Power on the Authorized operating channel. The station will continue to provide Fill-In service and repeat commonly owned Primary FM station KGGL (FM) HD-2 Channel.

The map below demonstrates contour protection and compliance with contour and Primary Station requirements.



Proposed Facility:
Blue - 100dBu(50,10)
Green - 60dBu(50,50)
Orange - 54dBu(50,10)
Red - 40dBu (50,10)

Other Facilities 60dBu(50,50):
Co-Channel - Red
First Adjacent - Orange
Second/Third Adjacent - Blue
Primary FM station 60dBu (50,50)

The proposed 100dBu contour is located inside the Protected 60dBu contour of KBAZ (FM) Channel 242-C which is collocated on the same tower as the proposed facility herein. An interference analysis would normally be conducted based on the U/D ratio of +40 dB at the proposed site. The signal of KBAZ(FM) is virtually immeasurably high making the relevant interfering contour of the proposed facility also virtually immeasurably high making the free space distance to this contour in a worse-case scenario utilizing a single dipole antenna at 1 meter or less from the aperture of the antenna.

The proposed 100dBu contour is located inside the Protected 60dBu contour of KYMI (FM) Channel 248-C2 which is located 24.3 km away from the proposed facility herein. An interference analysis has been conducted based on the U/D ratio of +40 dB at the proposed site. The signal of KBAZ(FM) is 77.5 dBu (50,50) making the relevant interfering contour of the proposed facility 117.5 dBu (50,10). The free space distance to this contour in a worse-case scenario utilizing a single dipole antenna at 93 meters from the aperture of the antenna.

- The applicant proposes to use the Nicom BKG77 one-bay antenna with the characteristics in the attached chart. The vertical field values were provided by the manufacturer and the calculations demonstrate that the interfering contour will not reach a point 2 meters above the ground at any depression angle from the antenna any farther than 25 meters from the tower location. The tower is located on Dean Stone Mountain in a group of towers which are all restricted access to the Public. The interfering contour is fully encompassed by this restricted area and cannot reach any location where the general public would be present.

Based on this showing, a waiver of Section 74.1204 is requested in accordance with Living Way Ministries, Inc. (FCC 08-242) on the basis of zero population in the area of potential interference.

NICOM BKG77
1-Bay Circularly Polarized FM Antenna



Frequency =

96.9
117.5

 Mhz
Interfering Contour

dBu (50,10)

ERP=

99
24

 watts
Height =

m AGL

Depression Angle	Relative Field (o)	Effective Power (w)	Distance to Contour (m)	Distance from Antenna to Ground (m)	Clearance (m)
1	1.000	99.0	93.07	1,833.51	1740
2	0.996	98.2	92.70	916.90	824
3	0.992	97.4	92.33	611.42	519
4	0.989	96.8	92.05	458.73	367
5	0.983	95.7	91.49	367.15	276
6	0.981	95.3	91.30	306.13	215
7	0.979	94.9	91.12	262.57	171
8	0.975	94.1	90.74	229.92	139
9	0.973	93.7	90.56	204.55	114
10	0.971	93.3	90.37	184.28	94
11	0.970	93.1	90.28	167.70	77
12	0.969	93.0	90.19	153.91	64
13	0.968	92.8	90.09	142.25	52
14	0.966	92.4	89.91	132.27	42
15	0.965	92.2	89.81	123.64	34
16	0.961	91.4	89.44	116.09	27
17	0.957	90.7	89.07	109.45	20
18	0.953	89.9	88.70	103.55	15
19	0.949	89.2	88.33	98.29	10
20	0.945	88.4	87.95	93.56	6
21	0.941	87.7	87.58	89.29	2
22	0.938	87.1	87.30	85.42	(2)
23	0.934	86.4	86.93	81.90	(5)
24	0.930	85.6	86.56	78.67	(8)
25	0.926	84.9	86.18	75.72	(10)
26	0.915	82.9	85.16	73.00	(12)
27	0.904	80.9	84.14	70.48	(14)
28	0.894	79.1	83.21	68.16	(15)
29	0.883	77.2	82.18	66.00	(16)
30	0.872	75.3	81.16	64.00	(17)
31	0.868	74.6	80.79	62.13	(19)
32	0.863	73.7	80.32	60.39	(20)
33	0.858	72.9	79.86	58.75	(21)
34	0.850	71.5	79.11	57.22	(22)
35	0.843	70.4	78.46	55.79	(23)
36	0.834	68.9	77.62	54.44	(23)
37	0.824	67.2	76.69	53.17	(24)
38	0.816	65.9	75.95	51.98	(24)
39	0.807	64.5	75.11	50.85	(24)
40	0.798	63.0	74.27	49.78	(24)
41	0.788	61.5	73.34	48.77	(25)
42	0.778	59.9	72.41	47.82	(25)
43	0.767	58.2	71.39	46.92	(24)
44	0.755	56.4	70.27	46.06	(24)
45	0.744	54.8	69.25	45.25	(24)

Depression Angle	Relative Field	Effective Power (w)	Distance to Contour (m)	Distance from Antenna to Ground (m)	Clearance (m)
46	0.729	52.6	67.85	33.36	(23)
47	0.716	50.8	66.64	32.82	(23)
48	0.704	49.1	65.52	32.30	(22)
49	0.693	47.5	64.50	31.80	(22)
50	0.682	46.0	63.47	31.33	(22)
51	0.670	44.4	62.36	30.88	(21)
52	0.659	43.0	61.33	30.46	(21)
53	0.648	41.6	60.31	30.05	(20)
54	0.637	40.2	59.29	29.67	(20)
55	0.626	38.8	58.26	29.30	(19)
56	0.611	37.0	56.87	28.95	(18)
57	0.602	35.9	56.03	28.62	(18)
58	0.588	34.2	54.73	28.30	(17)
59	0.579	33.2	53.89	28.00	(17)
60	0.563	31.4	52.40	27.71	(15)
61	0.551	30.1	51.28	27.44	(15)
62	0.538	28.7	50.07	27.18	(14)
63	0.523	27.1	48.68	26.94	(13)
64	0.511	25.9	47.56	26.70	(12)
65	0.499	24.7	46.44	26.48	(11)
66	0.484	23.2	45.05	26.27	(10)
67	0.469	21.8	43.65	26.07	(9)
68	0.454	20.4	42.25	25.88	(8)
69	0.439	19.1	40.86	25.71	(7)
70	0.424	17.8	39.46	25.54	(5)
71	0.409	16.6	38.07	25.38	(4)
72	0.398	15.7	37.04	25.24	(3)
73	0.381	14.4	35.46	25.10	(2)
74	0.366	13.3	34.06	24.97	(1)
75	0.351	12.2	32.67	24.85	0
76	0.338	11.3	31.46	24.73	2
77	0.319	10.1	29.69	24.63	3
78	0.302	9.0	28.11	24.54	5
79	0.290	8.3	26.99	24.45	6
80	0.277	7.6	25.78	24.37	7
81	0.261	6.7	24.29	24.30	8
82	0.248	6.1	23.08	24.24	9
83	0.231	5.3	21.50	24.18	11
84	0.215	4.6	20.01	24.13	12
85	0.200	4.0	18.61	24.09	13
86	0.189	3.5	17.59	24.06	14
87	0.174	3.0	16.19	24.03	16
88	0.161	2.6	14.98	24.01	17
89	0.147	2.1	13.68	24.00	18
90	0.134	1.8	0.00	24.00	32

NOTES:

- HEIGHT HAS BEEN REDUCED BY 2 METERS TO ALLOW FOR HUMAN EXPOSURE
- DISTANCE FROM ANTENNA TO GROUND IS ACTUALLY TO A POINT 2 METERS ABOVE GROUND