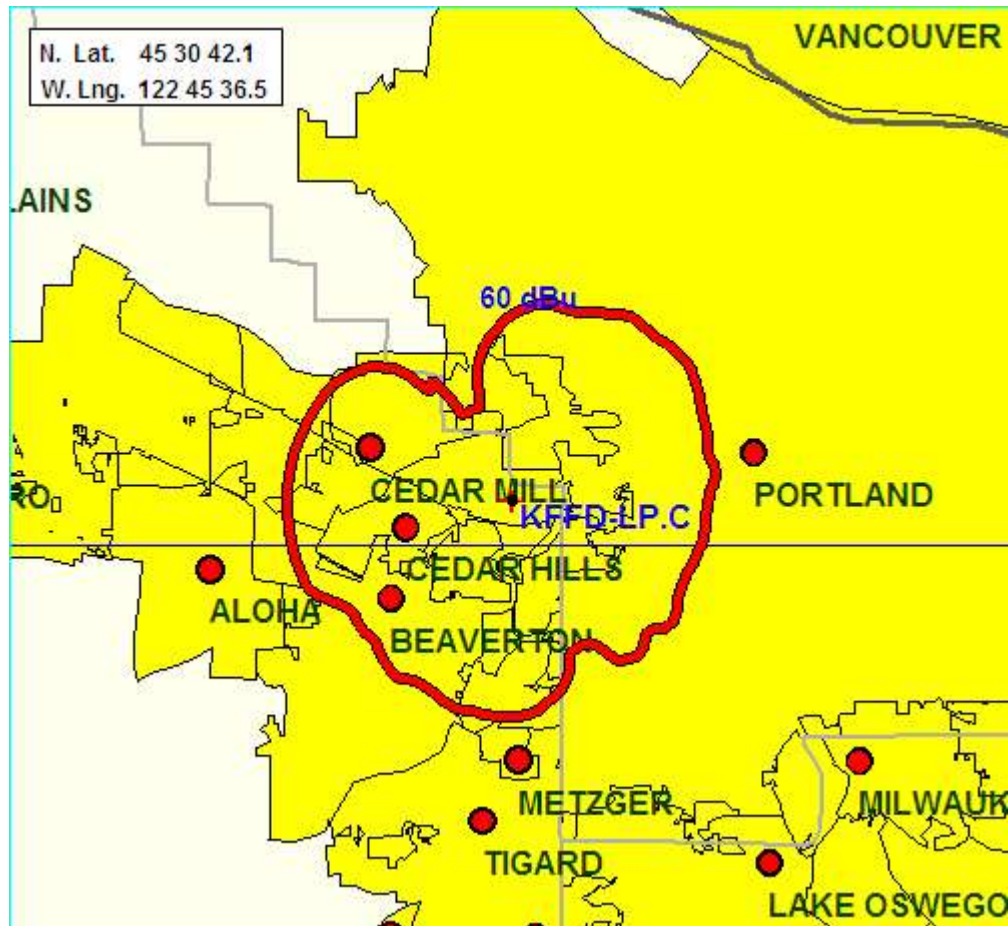


**FREEFORM PORTLAND  
MINOR MODIFICATION Low Power FM  
KFFD-LP BEAVERTON, OREGON FAC ID # 196609**

**Parameters**

Coordinates:	45 30 42.1 N 122 45 36.5 W NAD 27
	45 30 41.5 N 122 45 40.9 W NAD 83
CH:	252
Frequency:	98.3 MHz
Power:	0.0054 kW
Type:	LPFM
Ground:	203 M
COR:	213 M
HAAT:	126.4 M
AGL:	10 M



FCC 60 dBu F(50,50)

### Spacing

Freeform Portland

REFERENCE			DISPLAY DATES
45 30 42.1 N.	CLASS = L1 Int = L1		DATA 11-14-17
122 45 36.5 W.	Current Spacings to 2nd Adj.		SEARCH 11-19-17
----- Channel 252 - 98.3 MHz -----			

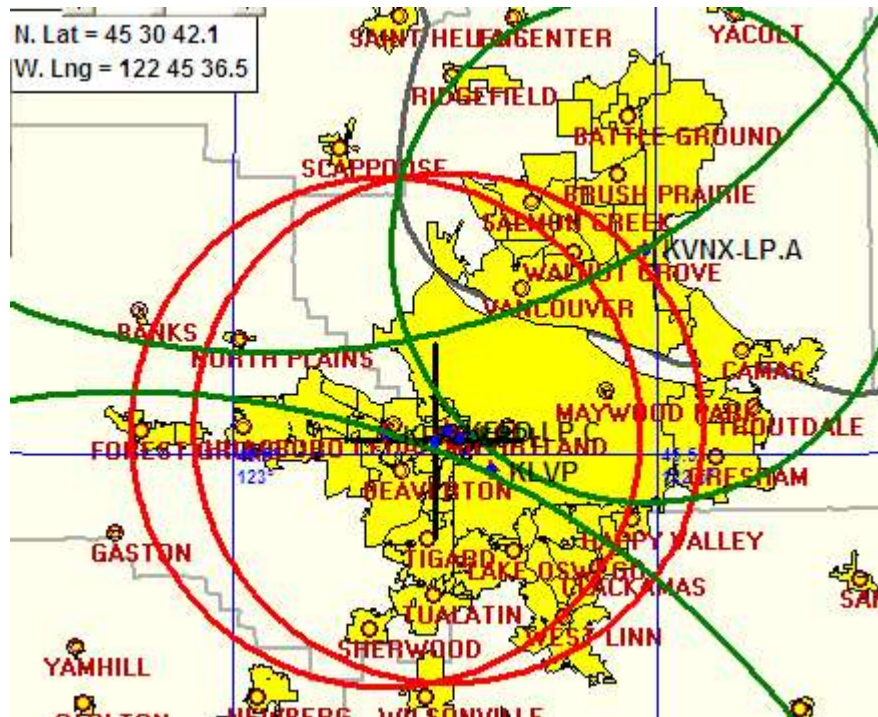
Call		Channel	Location		Azi	Dist	FCC	Margin
*KUPL	LIC	254C1	Portland	OR	76.6	2.18	72.5	-70.3
*KLVP	LIC	250C1	Aloha	OR	116.3	5.72	72.5	-66.8
KFFD-LP	CP	252L1	Beaverton	OR	42.7	1.64	23.5	-21.9
KFFD-LP	LIC	252L1	Beaverton	OR	280.0	4.73	23.5	-18.8
NEW	CP	252C3	Dallas	OR	201.3	78.29	77.5	0.8
NEW	CP	252C3	Dallas	OR	201.3	78.29	77.5	0.8
KVNX-LP	APP	252L1	Vancouver	WA	47.3	26.37	23.5	2.9
KPPK	LIC	252A	Rainier	OR	348.5	76.18	66.5	9.7

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Reference station has protected zone issue: Canada- AM tower  
All separation margins include rounding

\*Second Adj - See Waiver

### Spacing Map



Red Circles: KFFD-LP Licensed, and KFFD-LP Current CP

### TOWAIR Determination (PASS)

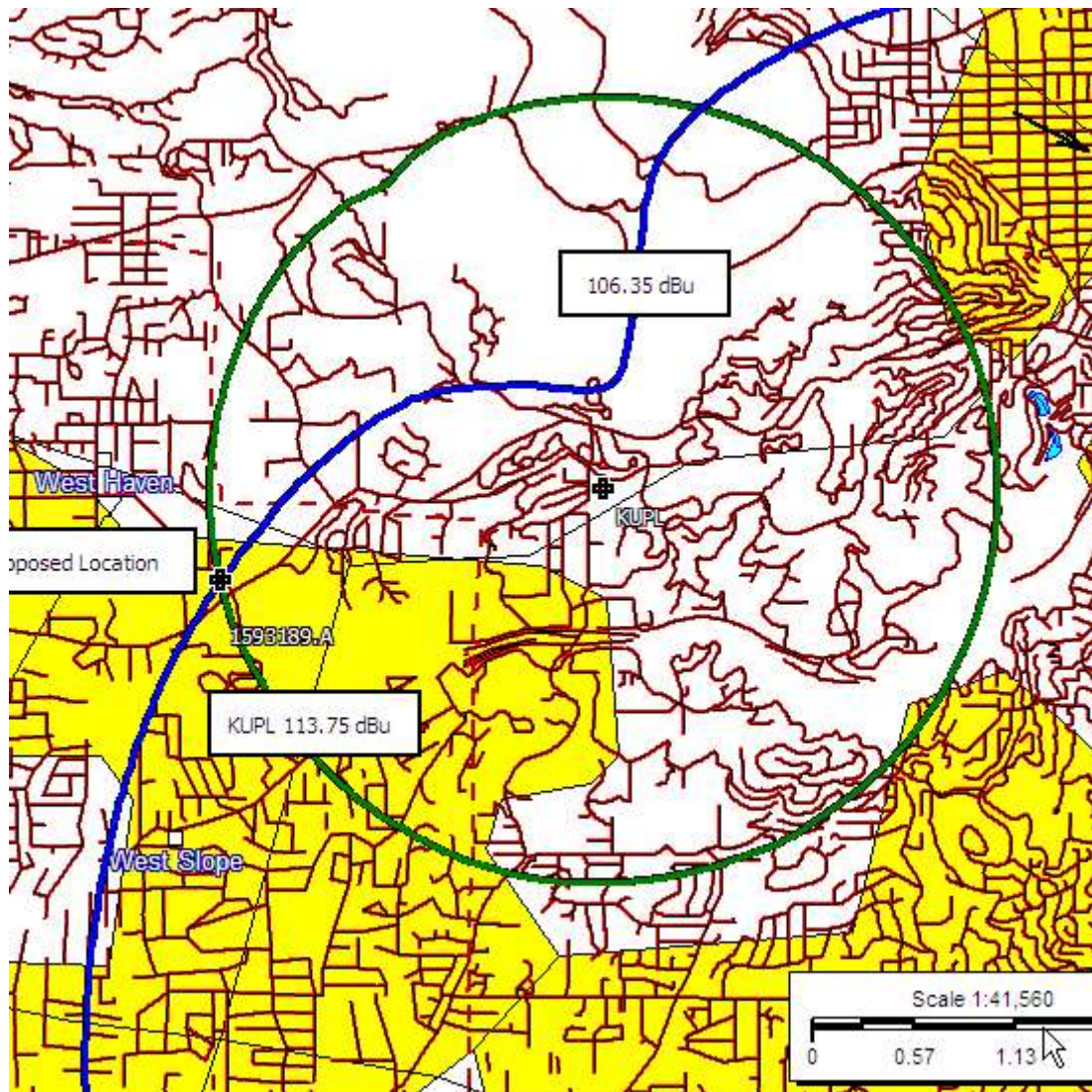
DETERMINATION Results							
PASS SLOPE(25:1): NO FAA REQ-HELIPORT 7211.87 MTRS (7.2119 KM) AWAY							
Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
HELI	C	45-31-31.00N	122-40-15.00W	PORTLAND DOWNTOWN	MULTNOMAH PORTLAND, OR	23.8	24.399999999999999
Your Specifications							
NAD83 Coordinates							
Latitude						45-30-41.5 north	
Longitude						122-45-40.9 west	
Measurements (Meters)							
Overall Structure Height (AGL)						10	
Support Structure Height (AGL)						0	
Site Elevation (AMSL)						203	
Structure Type							
POLE - Any type of Pole							

### Second Adjacent Channel Waiver Request

License respectfully requests a "second adjacent channel waiver" with regards to Section 47 C.F.R. Section 73.807 of the FCC rules based upon the "Living Way" precedence (Living Way Ministries, Inc., Memorandum Opinion and Order, 17 FCC Red 17054, 17056, ¶ 5 (2002), recon. denied 23 FCC Red 15070 (2008)). This will be accomplished by used Free Space methodology of calculation.

Using U/D methodology, at the proposed KFFD-LP transmitter location KUPL has a signal strength of 113.75 dBu and KLVP has a signal strength of 106.35 dBu. Interference will occur when the lesser signal strength (KLVP) interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 146.35 dBu contour.





The distance to this contour, using free space method:

$D = (7.01 \cdot P^{1/2}) / E$ , where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

P = 5.4 w, E = 146.35 dBu  
D = >1 meter

With the antenna proposed 10 meters above ground, the >1 meter radius around the antenna contains an area of zero population

Due to zero population within this radiation radius, this meets the "Living way" Criteria to qualify for a Waiver of 47 C.F.R. Section 73.807.

Thus, the applicant requests second adjacent waiver based upon evidence no interference is

proposed.