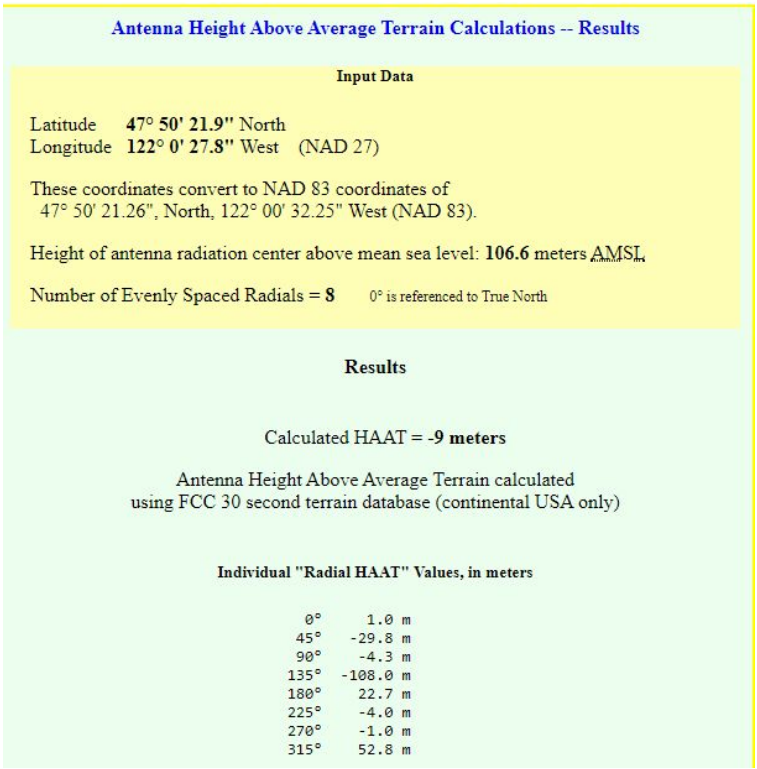
CONTINENTAL BROADCASTING
KWJZ-LP 107.3 FM HIGH ROCK WA
Fac ID 134276

MINOR CHANGE TO LICENSED FACILITY

Channel	297
New Location:	47 50 21.1 N 122 00 32.1 W -- NAD 83
	47 50 21.7 N 122 00 27.6 W -- NAD 27
Antenna AGL	15.6 m (11 m water tower + 4.6 m mast)
Antenna Ground	91 m
Antenna COR	106.6 m
HAAT	-9 m (see Figure 1)
Power	100 w



Antenna Height Above Average Terrain Calculations -- Results

Input Data

Latitude **47° 50' 21.9"** North
Longitude **122° 0' 27.8"** West (NAD 27)

These coordinates convert to NAD 83 coordinates of
47° 50' 21.26", North, 122° 00' 32.25" West (NAD 83).

Height of antenna radiation center above mean sea level: **106.6** meters AMSL

Number of Evenly Spaced Radials = **8** 0° is referenced to True North

Results

Calculated HAAT = **-9 meters**

Antenna Height Above Average Terrain calculated
using FCC 30 second terrain database (continental USA only)

Individual "Radial HAAT" Values, in meters

0°	1.0 m
45°	-29.8 m
90°	-4.3 m
135°	-108.0 m
180°	22.7 m
225°	-4.0 m
270°	-1.0 m
315°	52.8 m

Figure 1: FCC HAAT Calculation

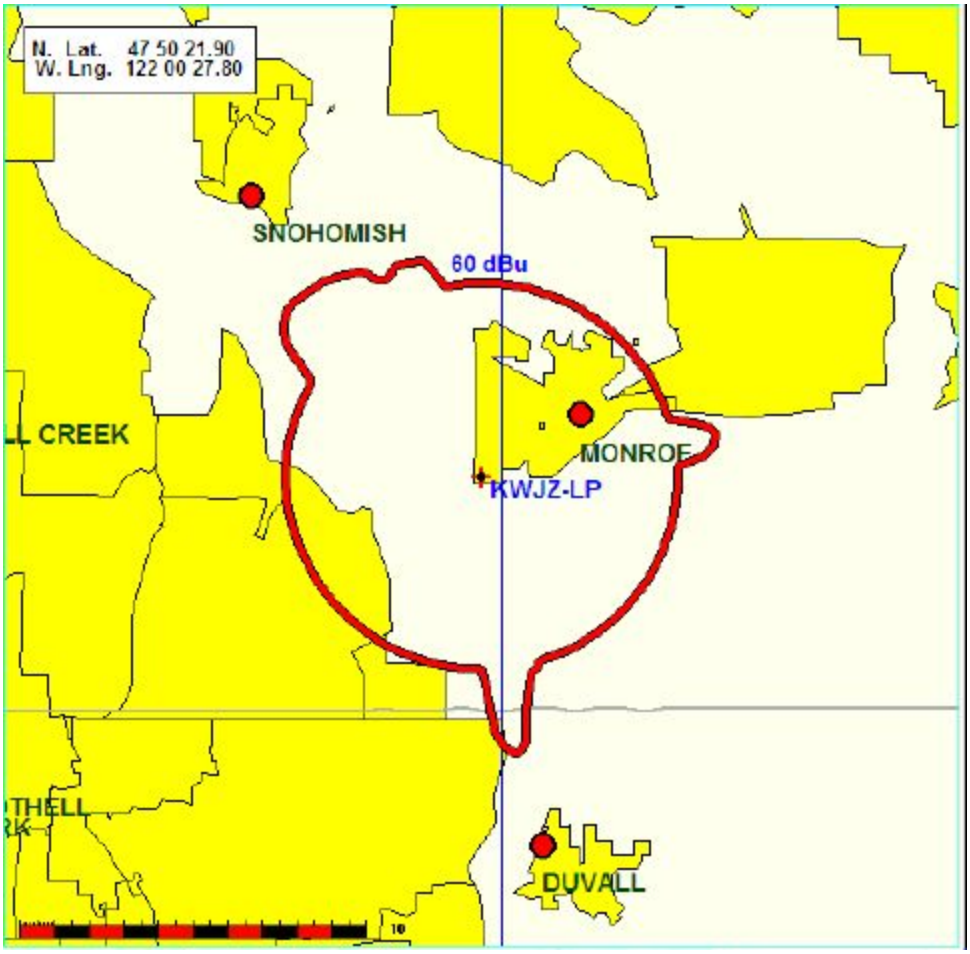


Figure 2: Proposed 60 dBu F(50,50)

SPACING

Continental Broadcasting

REFERENCE — DISPLAY DATES
47 50 21.70 N. — CLASS = L1 — DATA 01-20-20
122 00 27.60 W. — Current Spacings to 2nd Adj. — SEARCH 02-17-20

Channel 297 - 107.3 MHz

Call		Channel	Location		Azi	Dist	FCC	Margin
*KNDD	LIC-D	299C	Seattle	WA	176.3	37.39	92.5	-55.1
*KRWM	LIC-Z	295C1	Bremerton	WA	193.0	33.76	72.5	-38.7
~~KWJZ-LP~~	~~LIC~~	~~297L1~~	~~High Rock~~	~~WA~~	~~148.4~~	~~6.49~~	~~23.5~~	~~-17.0~~
KBFG-LP	LIC	297L1	Seattle	WA	233.8	32.30	23.5	8.8
K297BH	LIC-D	297D	Mount Vernon	WA	341.7	61.60	31.5	30.1
AL1154		297B	Victoria	BC	300.5	129.07	92.0	37.1
K297BD	LIC	297D	Greenwater	WA	169.8	70.07	31.5	38.6
K297BD	CP -D	297D	Greenwater	WA	169.8	70.07	31.5	38.6

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

* See second adjacent waiver request

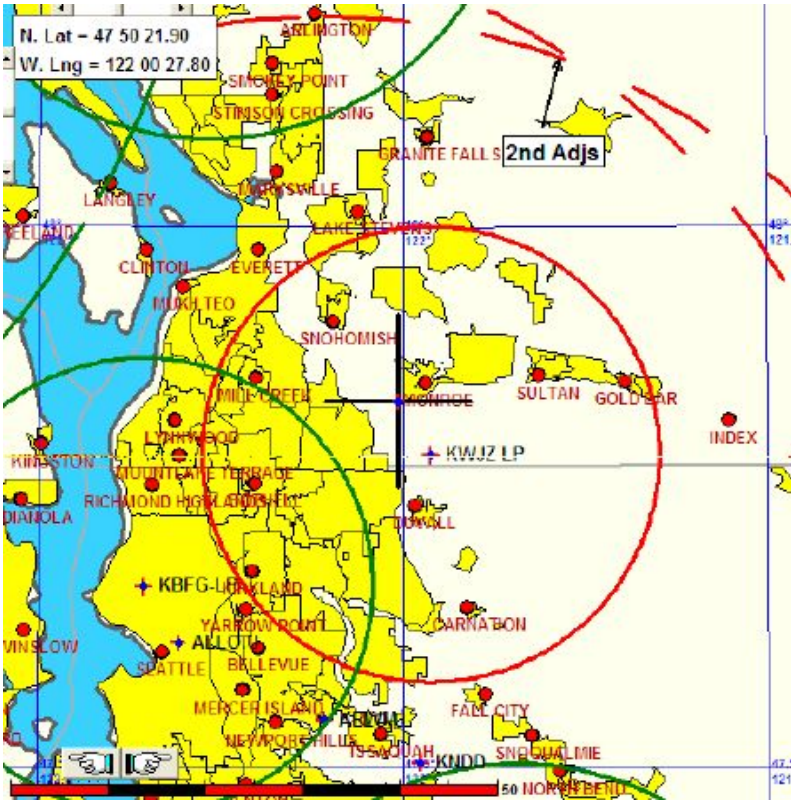


Figure 3: Spacing

TOWAIR (Pass)

DETERMINATION Results	
Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.	
Your Specifications	
NAD83 Coordinates	
Latitude	47-50-21.1 north
Longitude	122-00-32.1 west
Measurements (Meters)	
Overall Structure Height (AGL)	15.6
Support Structure Height (AGL)	11
Site Elevation (AMSL)	91
Structure Type	
TANK - Any type of Tank (Water, Gas, etc)	

Figure 4

MINOR CHANGE MOVE

Facility proposes 6.498 km move. This comports to the rounded distance move in Section 73.870(a) for which covers relocation up to 6.499 km considering rounding.[1] The is demonstrated below where the NAD 27 coordinates were input into the FCC's Section 73.208 distance calculator:

[1] Rounding is used FM station distance calculation from § 73.208(c)(8). See Calvary Chapel of Costa Mesa, Inc., 27 FCC 557 (2012), where "The issue is whether a licensee filing a corrective modification of license application under Section 73.1690 may use the rounding methodology of Section 73.208", reflecting on In Leonard S. Joyce, Esq. (13 FCC Rcd at 19605) for decision, where "The staff found that rigid application of the spacing requirements in such circumstances might have a deterrent effect."

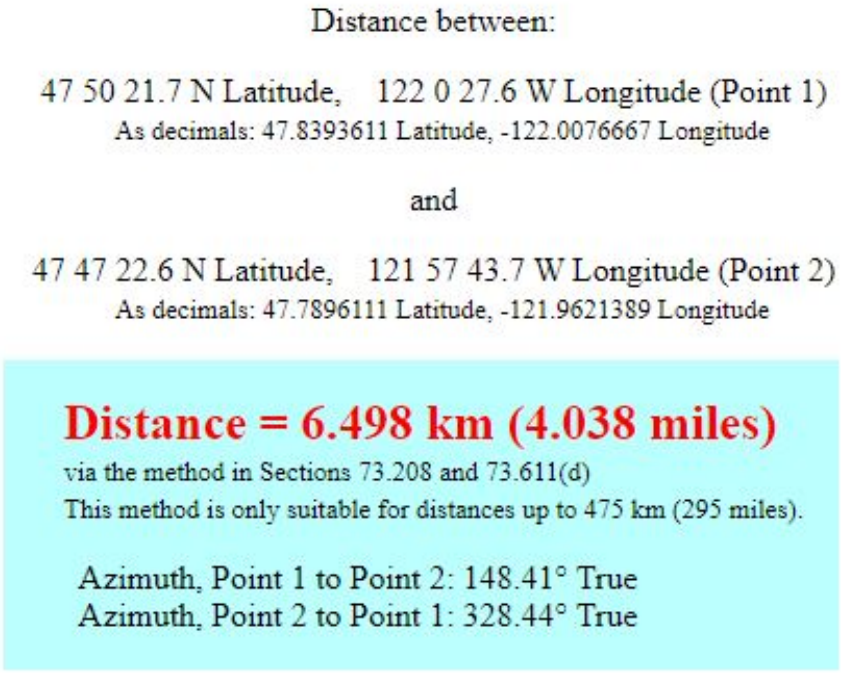


Figure 5

SECOND ADJACENT 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 using Free Space methodology of calculation.

Using U/D methodology, at the proposed KWJZ-LP transmitter location KRWM has a signal strength of 76.8 dBu and KNDD has a signal strength of 83.7 dBu. Interference will occur when the lesser signal strength (KRWM) interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 116.8 dBu contour.

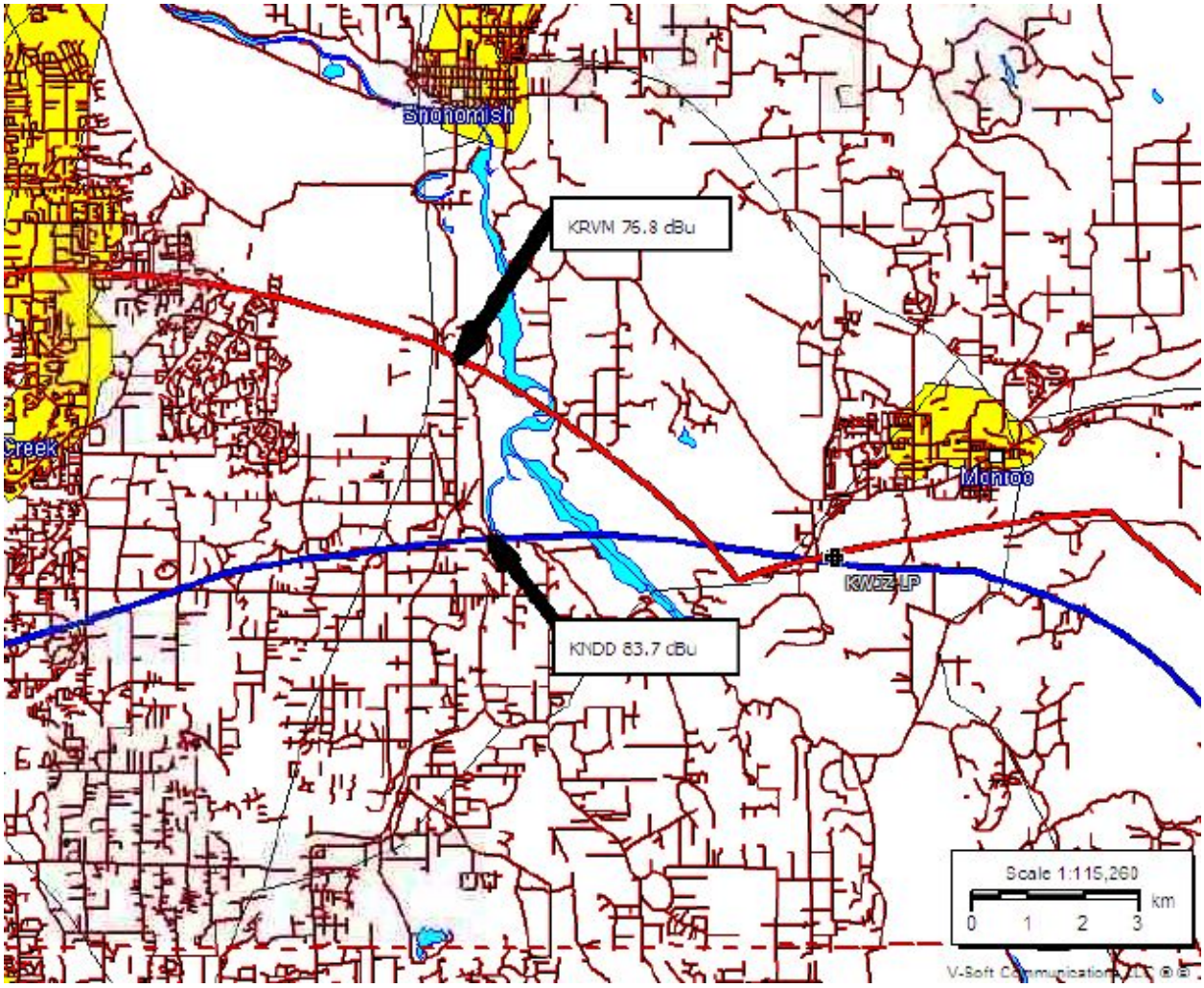


Figure 6: Fields strengths at proposed site of second adjacent channels

The distance to this contour, using free space method:
D = (7.01*$P^{1/2}$)/E, where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

P = 100 w, E = 116.8 dBu D = 101 meters

Figure 7: Interference area

Referring to aerial photo above, the 101 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 a second adjacent waiver based upon evidence no interference is proposed.