

# FM TRANSLATOR APPLICATION

CHANNEL 274 (102.7 MHz)  
THE DALLES, OREGON

## EXHIBIT No. E- 5

### TABULATED CONTOUR DISTANCE FOR EXHIBIT No. E-4

DISTANCES TO CONTOURS (Kilometers) :

Frequency: 102.7000 MHz  
Coordinates: N 45 42 44 W 121 6 50  
F(50,10) Curves Number of Contours: 5

AZ (deg)	HAAT (m)	ERP (dBk)	CONTOUR LEVELS (dBu):				
			60.0	100.0	80.0	54.0	40.0
			*				
.0	495	-20.00	12.6	.0	2.1	19.2	44.8
10.0	541	-20.00	13.1	.0	2.1	20.2	47.5
20.0	533	-20.00	13.0	.0	2.1	20.0	47.1
30.0	542	-20.00	13.2	.0	2.1	20.2	47.5
40.0	491	-20.00	12.6	.0	2.1	19.1	44.6
50.0	431	-20.00	11.9	.0	2.1	17.7	41.0
60.0	445	-20.00	12.0	.0	2.1	18.1	41.8
70.0	517	-20.00	12.9	.0	2.1	19.7	46.2
80.0	528	-20.00	13.0	.0	2.1	19.9	46.8
90.0	503	-20.00	12.7	.0	2.1	19.4	45.3
100.0	360	-20.00	10.9	.0	2.0	15.8	37.0
110.0	507	-20.00	12.8	.0	2.1	19.5	45.6
120.0	659	-20.00	14.4	.0	2.2	22.7	52.5
130.0	726	-20.00	15.0	.0	2.2	24.0	55.0
140.0	791	-20.00	15.5	.0	2.2	25.3	57.3
150.0	768	-20.00	15.4	.0	2.2	24.9	56.5
160.0	804	-20.00	15.6	.0	2.2	25.5	57.7
170.0	817	-20.00	15.7	.0	2.2	25.7	58.1
180.0	817	-20.00	15.7	.0	2.2	25.8	58.1
190.0	840	-20.00	15.8	.0	2.2	26.1	58.8
200.0	839	-20.00	15.8	.0	2.2	26.1	58.8
210.0	819	-20.00	15.7	.0	2.2	25.8	58.2
220.0	758	-20.00	15.3	.0	2.2	24.7	56.2
230.0	700	-20.00	14.8	.0	2.2	23.5	54.0
240.0	549	-20.00	13.2	.0	2.1	20.4	47.9
250.0	575	-20.00	13.6	.0	2.1	20.9	49.1
260.0	647	-20.00	14.3	.0	2.2	22.4	52.0
270.0	695	-20.00	14.7	.0	2.2	23.4	53.8
280.0	660	-20.00	14.4	.0	2.2	22.7	52.5
290.0	595	-20.00	13.8	.0	2.2	21.3	50.0
300.0	527	-20.00	13.0	.0	2.1	19.9	46.7
310.0	501	-20.00	12.7	.0	2.1	19.3	45.2
320.0	468	-20.00	12.3	.0	2.1	18.6	43.2
330.0	497	-20.00	12.6	.0	2.1	19.3	44.9
340.0	511	-20.00	12.8	.0	2.1	19.6	45.8
350.0	476	-20.00	12.4	.0	2.1	18.8	43.7

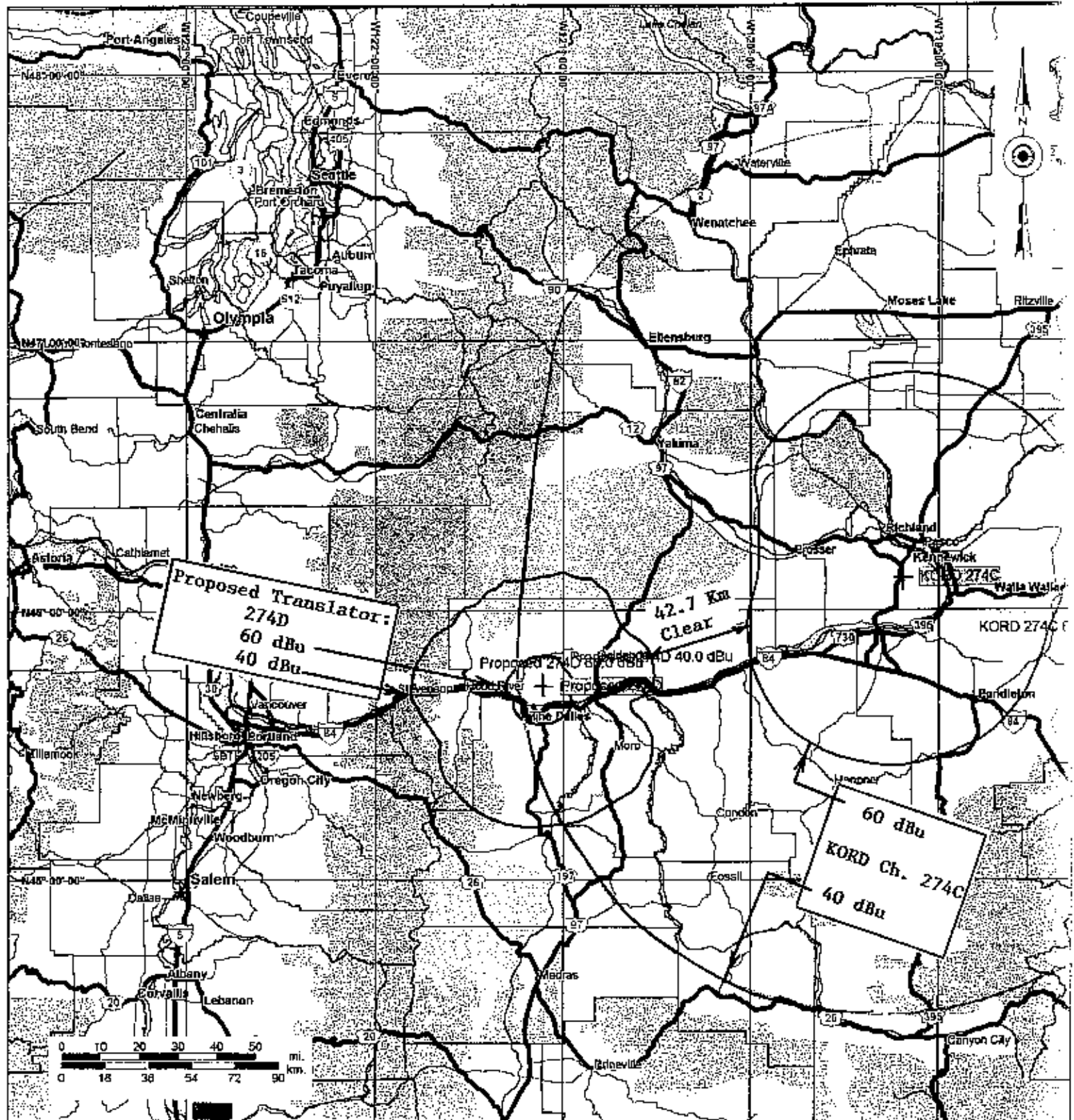
\* 50/50 Contour  
Rest of Contours 50/10

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EXHIBIT No. E- 6

MAP SHOWING FM STATION CONTOUR TO CONTOUR SPACING



# FM TRANSLATOR APPLICATION

CHANNEL 274 (102.7 MHz)  
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## EXHIBIT No. E- 7

### FM WITHIN & FM INTERFERENCE STUDY

FM WITHIN 230 KM  
\*\* CHANNELS 271 TO 277 \*\*

Proposed latitude: N. 45 42 44  
Proposed longitude: W. 121 6 50

Proposed channel: 274

Channel	Call	Record	City	State	Status	Degs.	Dist/Km.
271	C	KPQ-FM	71524	WENATCHEE	WA	LIC	16.9 181.5
272	C2	KYYT	12242	GOLDENDALE	WA	LIC	102.1 16.4
273	C	KZOK-FM	20357	SEATTLE	WA	LIC	341.8 209.7
273	C	KZOK-FM	20357	SEATTLE	WA	CP	339.5 217.2
273	D	K273AI	93257	ARIEL	WA	CP	284.7 133.5
274	C	KORD-FM	16726	RICHLAND	WA	LIC	74.0 154.9
275	C	KMNT	33829	CENTRALIA	WA	LIC	302.0 176.9
275	C	KMNT	33829	CENTRALIA	WA	LIC	302.0 176.9
276	C2	KQBE	52035	ELLENSBURG	WA	LIC	21.6 140.5
271	L1	NEW	13577	MADRAS	OR	APP	180.6 119.9
271	C3	N	0	PRINEVILLE	OR	ADD	168.9 155.0
272	C3	KCRX-FM	33946	SEASIDE	OR	LIC	276.9 220.9
272	D	K272DW	91973	ELWOOD	OR	CP MO	235.0 112.5
274	D	K274AR	60147	GRESHAM	OR	CP MO	258.7 125.9
274	D	K274AR	60147	GRESHAM	OR	LIC	258.6 125.7
275	C1	KSJJ	63433	REDMOND	OR	LIC	190.1 188.0
275	L1	NEW	13309	STAYTON	OR	APP	228.9 173.9
275	L1	NEW	13309	STAYTON	OR	APP	228.9 173.9
276	D	K276BU	50601	CORVALLIS	OR	LIC	234.9 207.3
276	D	K276EE	81601	THE DALLES	OR	LIC	194.4 23.5

CH	Call	Record	City	ST	Status	Bear.	Dist.	Reqd. Dist.	Result
274C	KORD	16726	Richland	WA	LIC	73.3	155.0	177.2	ACINF *
Prop F(50,10) 40 dBu 46.7 km + KORD F(50,50) 60 dBu 66.0 km = 112.7									
Prop F(50,50) 60 dBu 12.8 km + KORD F(50,10) 40 dBu 164.4 km = 177.2									
272C2	KYYT	12242	Goldendale	WA	LIC	102.0	16.4	35.8	-19.4 **
Prop F(50,10) 80 dBu 2.0 km + KYYT F(50,50) 60 dBu 33.7 km = 35.8									
Prop F(50,50) 60 dBu 10.7 km + KYYT F(50,10) 80 dBu 11.0 km = 21.7									

\* Contours for this station (KORD-FM) is shown on attached EXHIBIT No. E-6. A clear area of 42.7 Km exists before overlap of KORD-FM protected 60 dBu contour by our proposed Translator 40 dBu interference contour.

\*\* This -19.4 Km short spacing is to the applicants primary station which is the input to this Translator.

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EXHIBIT No. E- 8

\* \* \* WORST CASE FM RADIATION AT A GIVEN DISTANCE \* \* \*

DENSITY BELOW TRANSLATOR ANTENNA	DISTANCE BELOW TRANSLATOR ANTENNA
1.000 mW/cm2	0.82 meters
0.200 mW/cm2	1.83 meters
0.000 mW/cm2	58.00 meters

ANTENNA CENTER AT 60 meters AGL