Non-Interference Compliance
K214CM, Roseburg, OR FAC# 77106

Description of Exhibit Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

> *[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.*

Page 3 of this exhibit contains the adjacent channel study created with ComStudy 2.2 which shows all co-channel, 1st adjacent, 2nd adjacent and 3rd adjacent to the proposal.

Page 4 of this exhibit is a Google Earth aerial photo of the vicinity surrounding the proposed translator's tower site with the plotted zone of predicted interference.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBµ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

File Number	Callsign	Contour at Tower	Min. Contour
BLED-19910103KA	KSRS	82.9	82.9
0000167176	KQUA-FM	61.0	61.0
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour			**61.0**

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **61.0 dBµ**, this makes the proposed translator's worst-case interfering contour **101.0 dBµ.** By the free-space equation, this contour is calculated to extend a maximum of **296.3m** from the transmit antenna.

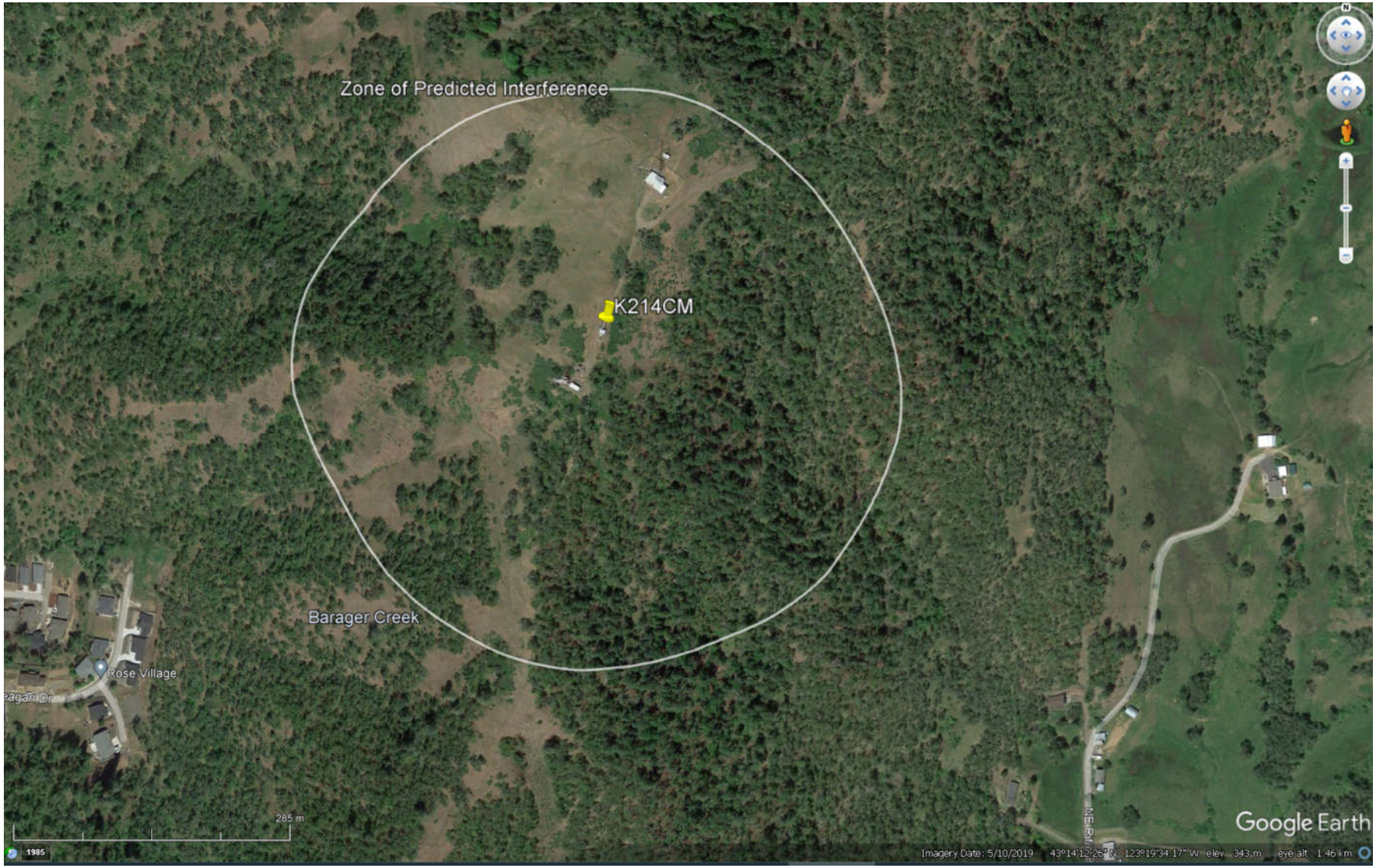
The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population").

Note:The only structures within the zone of predicted interference are unoccupied communications buildings so in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer:	**SWR**
Antenna Model:	**FMEC @ 200°**
CORAGL:	**14 m**
Maximum ERP:	**0.023 kW**
Interfering Contour:	**101.0 dBµ**
Max Int. Contour Distance:	**296.3 m**

Adjacent Channel Study
K214CM, Roseburg, OR FAC# 77106
4/13/2023

Callsign	State	City	Channel	ERP (W)	Class	Status	Distance (km)	Clr
KSRS	OR	ROSEBURG	218	2000	A	LIC	4.63	-27.46 dB
KQUA-FM	OR	GLIDE	213	500	C3	CP	17.3	-1.43 dB
KWAX	OR	EUGENE	216	21500	C1	LIC	86.81	0.92 dB
KJCH	OR	COOS BAY	215	3500	C2	LIC	83.28	4.79 dB
KJCH	OR	COOS BAY	215	3500	C2	APP	83.28	4.79 dB
KWAX	OR	EUGENE	216	2200	C1	LIC	86.81	12.15 dB
KDXA	OR	GLENDALE	217	70	A	CP MOD	60.25	12.48 dB
K216DR	OR	CENTRAL POINT	216	10	D	LIC	107.3	15.97 dB
KLXG	OR	GRANTS PASS	216	500	A	LIC	85.61	15.33 dB
KDXA	OR	GLENDALE	217	6	A	LIC	56.26	19.71 dB
KMHS-FM	OR	COOS BAY	217	10000	C3	LIC	73.03	19.36 dB
K213CF	OR	GRANTS PASS	213	10	D	LIC	60.77	22.43 dB
K215AR	OR	CAVE JUNCTION, ETC.	215	78	D	LIC	111.95	24.53 dB
KDOV	OR	MEDFORD	219	26000	C2	LIC	112.61	27.00 dB
KZBY	OR	COOS BAY	213	880	A	LIC	67.79	29.45 dB
K216BD	CA	FORT JONES, ETC.	216	295	D	LIC	172.28	30.00 dB
K217AF	OR	LANGLOIS	217	87	D	LIC	100.79	33.33 dB
K216FE	CA	CRESCENT CITY, ETC.	216	162	D	LIC	179.31	34.02 dB
K218AE	OR	COTTAGE GROVE	218	75	D	LIC	64.37	35.48 dB
KSKF	OR	KLAMATH FALLS	215	6500	C1	LIC	187.45	36.08 dB
KHEC	CA	CRESCENT CITY	216	125	A	LIC	179.31	36.96 dB
K219CK	OR	COOS BAY	219	62	D	LIC	75.82	37.39 dB
KOAB-FM	OR	BEND	217	75000	C1	LIC	185.84	38.72 dB
KXCR	OR	FLORENCE	214	900	A	LIC	100.65	39.97 dB


Zone of Predicted Interference
K214CM
Barager Creek
Rose Village
285 m
Google Earth
Imagery Date: 5/10/2019