

Non-Interference Compliance K213CF, Grants Pass, OR FAC# 82789

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.

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
BMLED-20010926	KSOR	145.5	145.5

Minimum F(50,50) Contour of Adjacent Station within
Proposed Translator's Standard Interfering Contour **145.5**

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 **145.5 dBμ**, this makes the proposed translator's worst-case interfering contour **185.5 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **.002m** 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: There are no structures within the zone of predicted interference, 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: SCALA
Antenna Model: CL-FM(V) @ 200°
CORAGL: 17 m
Maximum ERP: 0.01 kW
Interfering Contour: 185.5 dBμ
Max Int. Contour Distance: .002 m

Adjacent Channel Study
K213CF, Grants Pass, OR FAC# 82789
5/10/2023

Callsign	State	City	Channel	ERP (W)	Class	Status	Distance (km)	Clr
KSOR	OR	ASHLAND	211	38000	C	LIC	0.05	-82.69 dB
CE-MXG-180-AM	OR	ASHLAND	213	200	C3	CP MOD	81.87	1.05 dB
KQUA-FM	OR	GLIDE	213	500	C3	CP	56.76	5.65 dB
K214BO	OR	ASHLAND	214	7	D	LIC	59.12	14.04 dB
K215AR	OR	CAVE JUNCTION, ETC.	215	78	D	LIC	59.85	15.44 dB
KJCH	OR	COOS BAY	215	3500	C2	LIC	90.35	16.40 dB
KJCH	OR	COOS BAY	215	3500	C2	APP	90.35	16.40 dB
KLXG	OR	GRANTS PASS	216	500	A	LIC	26.06	18.86 dB
K213BU	OR	PORT ORFORD	213	77	D	LIC	104.91	23.12 dB
K216DR	OR	CENTRAL POINT	216	10	D	LIC	52.4	25.49 dB
KMWR	OR	BROOKINGS	214	100	A	LIC	108.37	25.39 dB
K214CM	OR	ROSEBURG	214	23	D	LIC	60.77	26.60 dB
KSKF	OR	KLAMATH FALLS	215	6500	C1	LIC	147.12	28.57 dB
KHSU	CA	ARCATA	213	8500	C1	LIC	226.84	31.15 dB
K214BS	CA	YREKA	214	10	D	LIC	130.31	33.00 dB
KWAX	OR	EUGENE	216	21500	C1	LIC	145.75	33.94 dB
K213AI	OR	KLAMATH FALLS	213	15	D	LIC	130.45	36.43 dB
KZBY	OR	COOS BAY	213	880	A	LIC	106.82	36.25 dB
KIBC	CA	BURNEY	213	3000	C2	LIC	235.48	38.21 dB