

Non-Interference Compliance K202CC, Provo, UT FAC# 77062

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.

<u>File Number</u>	<u>Call Sign</u>	<u>Contour at Tower</u>
BLFT-20050607ABK	K204BO	103.0 dBμ
Minimum F(50,50) Contour of Adjacent Station Within Proposed Translator's Interfering Contour		103.0 dBμ

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 **103.0 dBμ**, this makes the proposed translator's worst-case interfering contour **143.0 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **0.2m** from the transmit antenna.

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: SCALA
Antenna Model: CA2-V @ 110°
CORAGL: 11.0 m
Maximum ERP: 0.010 kW
Interfering Contour: 103.0 dBμ
Max Int. Contour Distance: 0.2 m

Adjacent Channel Study
K202CC, Provo, UT FAC# 77062
12-Mar-24

Callsign	State	City	Channel	ERP (W)	Class	Status	Distance (km)	Clr
K204BO	UT	PROVO, ETC.	204	10	D	LIC	0.16	-46.92 dB
NEW	UT	MORONI	203	3000	C1	APP	42.21	0.87 dB
K201AE	UT	COALVILLE, ETC.	201	115	D	LIC	89.72	1.54 dB
NCE-MXG-208	UT	SOLDIER SUMMIT	203	2500	C2	APP	63.53	5.92 dB
KPGR	UT	PLEASANT GROVE	201	115	A	LIC	31.38	12.17 dB
NCE-MXG-207-AMC	UT	TABIONA	201	500	A	CP MOD	106.64	14.00 dB
KUUB	UT	SALT LAKE CITY	202	2150	C2	CP MOD	65.56	16.36 dB
NCE-MXG-207-AMC	UT	CASTLE DALE	201	1250	C2	CP MOD	145.15	20.01 dB
K201BY	UT	DELTA, ETC.	201	50	D	LIC	93.63	20.69 dB
KUUB	UT	SALT LAKE CITY	202	450	C3	LIC	65.55	22.78 dB
KUAO	UT	NORTH OGDEN	204	73000	C1	LIC	170.55	31.49 dB
K202AD	UT	ORANGEVILLE, ETC.	202	19	D	LIC	111.96	34.35 dB
K201IZ	UT	VERNAL	201	205	D	LIC	201.28	35.97 dB
KBEE	UT	SALT LAKE CITY	254	40000	C	LIC	64.27	35.3
K203AB	UT	RURAL SUMMIT COUNTY	203	26	D	LIC	89.72	36.09 dB
KUXU	UT	MONROE	202	2500	C1	LIC	194.36	37.48 dB

**Aerial Photo Zone of Predicted Interference
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March 12, 2024**

