

[Exhibit 12]

## **Non-Interference Compliance**

Regarding Facility id 151525

Channel 257

### **Description of Exhibit 12 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 tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dB $\mu$  F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

## 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 dB $\mu$  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.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
263127	BLH19980304KJ	KEKB	136.8	131.8
	Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour			<b>131.8</b>

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 **131.8 dB $\mu$** , this makes the proposed translator's worst-case interfering contour **171.8 dB $\mu$** . By the free-space equation, this contour is calculated to extend a maximum of **0.1 m** from the transmit antenna.

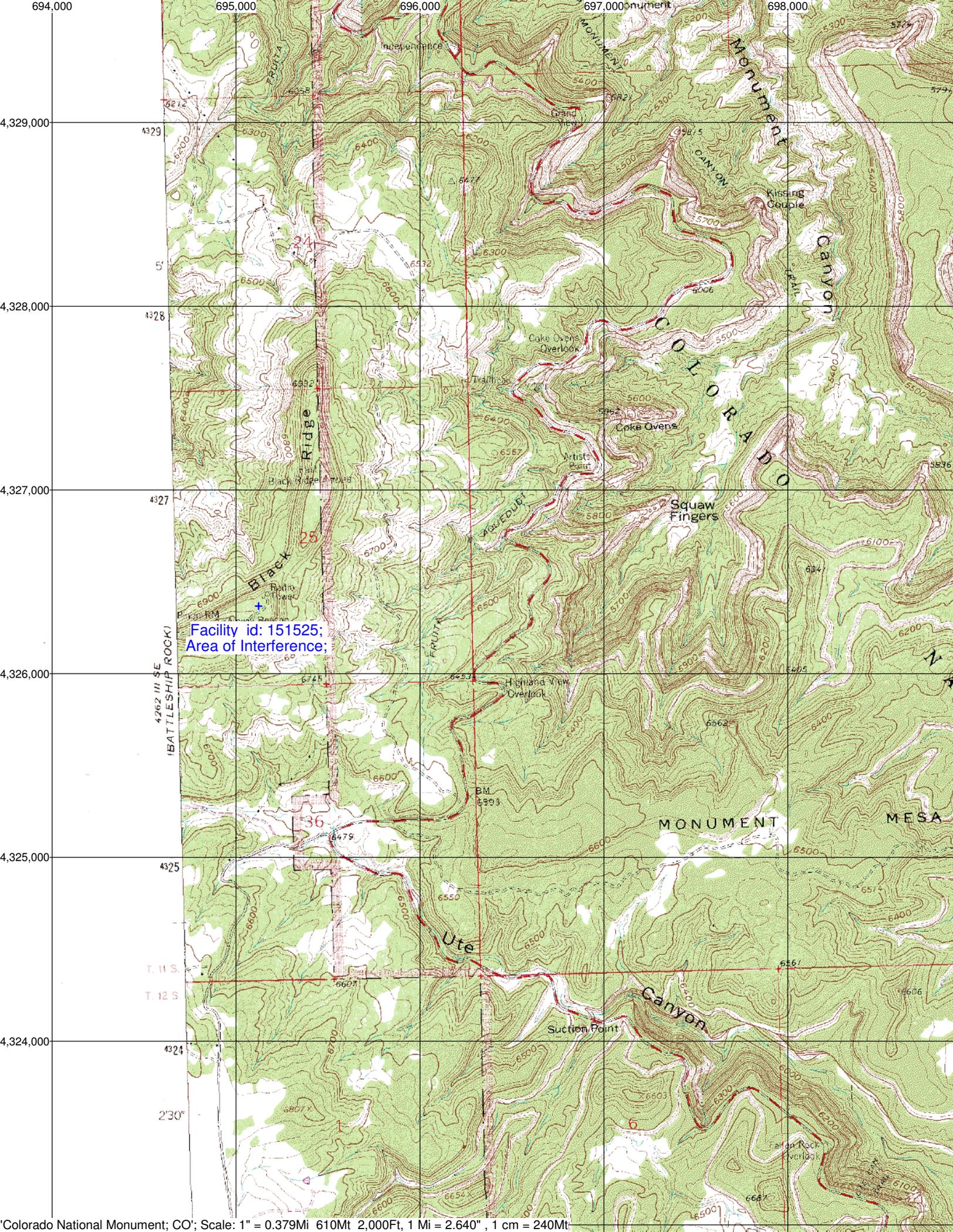
The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population"). Hence, 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:** SCA  
**Antenna Model:** FMV  
**CORAGL:** 9 m  
**Maximum ERP:** 0.01 kW  
**Interfering Contour:** 171.8 dB $\mu$   
**Max Int. Contour Distance:** 0.1 m

**Adjacent Channel Study**  
**For Station K254AV, Facility\_id: 151525**

**Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
263127	30431	BLH	19980304KJ	KEKB	CUMULUS LICENSING CORP.	C	FRUITA	CO	LIC	79	2269	260	2	0.3	0.0597
1135155	49229	BLFT	20060622ABO	K256AD	NORTH FORK VALLEY PUBLIC RADIO, INC	D	PALISADE	CO	LIC	0.01	3030	256	2	42.4	0
629791	139010	BNPFT	20030314BGB	NEW	PROFESSIONAL ANTENNA, TOWER AND TRANSL	D	RIFLE	CO	APP	0.019	2512	258	0	86.1	0
650081	156788	BNPFT	20030317LVE	NEW	DAVID B. SMITH	D	MOAB	UT	APP	0.25	1289	255	3	88.2	0
641065	148255	BNPFT	20030317KDU	NEW	PROFESSIONAL ANTENNA, TOWER AND TRANSL	D	MOAB	UT	APP	0.25	1482	257	1	90.5	0
1146951	73623	BLFT	20060111ABD	K257AU	CCR-MONTROSE IV, LLC	D	PAONIA	CO	LIC	0.25	2103	257	1	96.1	0
644621	151539	BNPFT	20030317DGK	NEW	EDGEWATER BROADCASTING, INC.	D	RIFLE	CO	APP	0.075	1914	258	0	96.9	0
631150	12377	BMJPF	20030310AYO	K244AN	COLORADO WEST BROADCASTING, INCORPORA	D	RIFLE	CO	APP	0.01	1882	258	0	99.2	0
1035186	12378	BLH	20050119ABM	KMTS	COLORADO WEST BROADCASTING, INCORPORA	C3	GLENWOOD SPRINGS	CO	LIC	10	2295	256	2	131.4	0



Facility id: 151525;  
Area of Interference;

