

## **Non-Interference Compliance**

Regarding Facility id 151525

Channel 258

### **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 dBμ 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.

**Note: Adjacent channel study on page 3 of this exhibit indicates a prohibitive overlap with co-channel application BMJPFT-20030310AYO for K244AN, Rifle, CO (FIN: 12377). This overlap is addressed in Exhibit 12A attached to this application.**

**Exhibit 12A is justification for a requested terrain waiver based on Longley Rice 40 dBμ interfering contour for proposed K258BP.**

### 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.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
1181225	BMLH20070420AAR	KEKB	136.8	116.4
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>116.4</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 **116.4 dBμ**, this makes the proposed translator's worst-case interfering contour **156.4 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **1.7 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:** 0.25 kW  
**Interfering Contour:** 156.4 dBμ  
**Max Int. Contour Distance:** 1.7 m

# **Adjacent Channel Study** **For Station K258BP, Facility\_id: 151525**

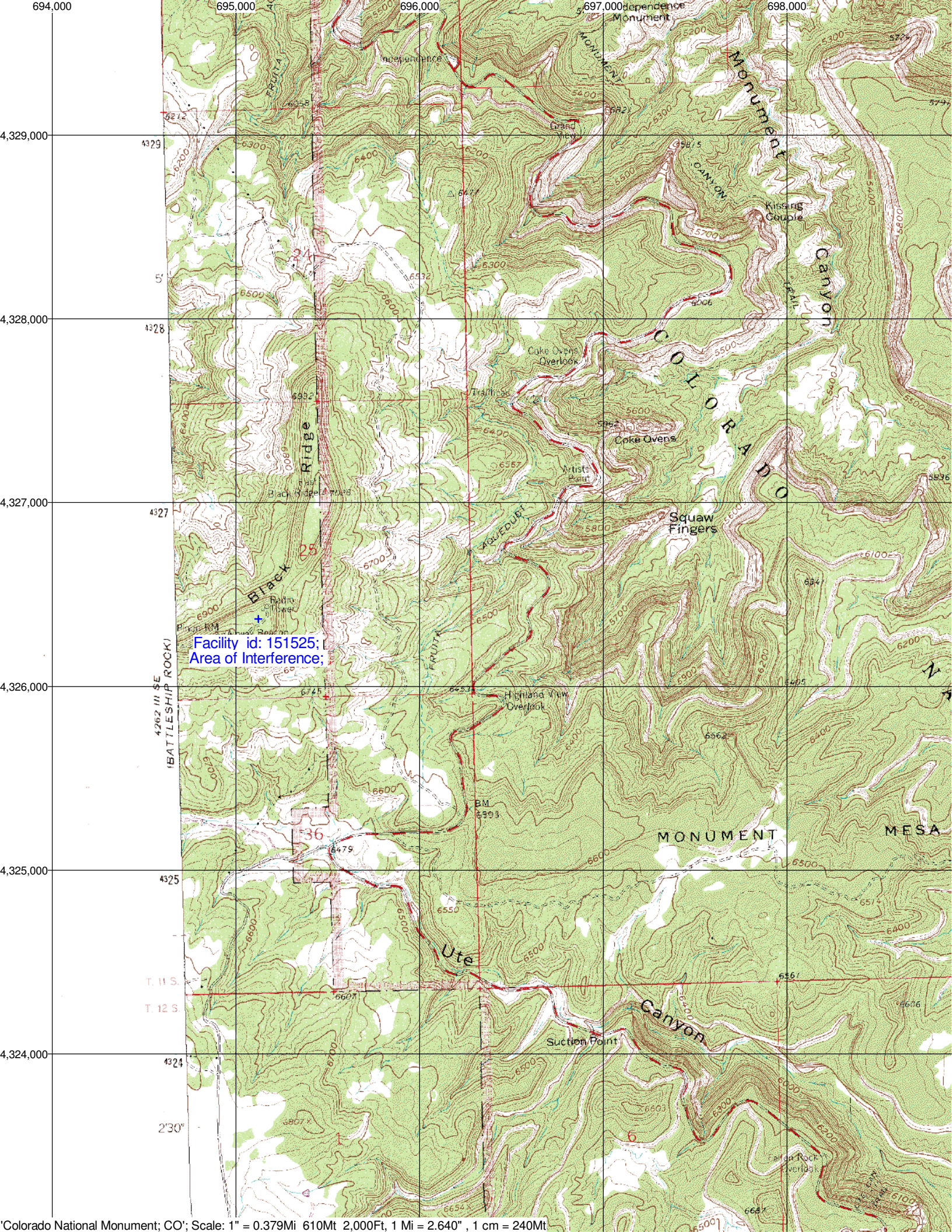
## **Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
631150	12377	BMJPFT	20030310AYO	K244AN	COLORADO WEST BROADCASTING, INCORPO	D	RIFLE	CO	APP	0.01	1882	258	0	99.2	2.2567
1181225	30431	BMLH	20070420AAR	KEKB	CUMULUS LICENSING LLC	C	FRUITA	CO	LIC	79	2269	260	2	0.3	1.4918
1135155	49229	BLFT	20060622ABO	K256AD	NORTH FORK VALLEY PUBLIC RADIO, INC	D	PALISADE	CO	LIC	0.01	3030	256	2	42.4	0
650081	156788	BNPFT	20030317LVE	NEW	DAVID B. SMITH	D	MOAB	UT	APP	0.25	1289	255	3	88.2	0
23200	73621	BLFT	19800902IW	K257AT	WOODLAND COMMUNICATIONS CORPORATIO	D	NUCLA & NATURITA	CO	LIC	0.085	2096	257	1	90.4	0
641065	148255	BNPFT	20030317KDU	NEW	PROFESSIONAL ANTENNA, TOWER AND TRAN	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
69912	73628	BLFT	19840530MA	K257AS	WOODLAND COMMUNICATIONS CORP.	D	RIDGWAY	CO	LIC	0.023	2476	257	1	129.2	0
1035186	12378	BLH	20050119ABM	KMTS	COLORADO WEST BROADCASTING, INCORPO	C3	GLENWOOD SPRINGS	CO	LIC	10	2295	256	2	131.4	0
631181	12375	BMJPFT	20030310AYH	K244CO	COLORADO WEST BROADCASTING, INCORPO	D	WEST GLENWOOD SPF	CO	APP	0.2	1824	258	0	133.2	0
288951	39907	BLFT	278	K261AI		D	GLENWOOD SPRINGS	CO	LIC	0.008	2220	261	3	134.7	0
1147150	139406	BLFT	20060905AAL	K255BL	PROFESSIONAL ANTENNA, TOWER AND TRAN	D	CRAIG	CO	LIC	0.01	2594	255	3	143.5	0
288948	56695	BLFT	258	K261AK		D	BASALT	CO	LIC	0.008	2490	261	3	145.1	0
299843	2440	BLFT	15	K257AA		D	VERNAL	UT	LIC	0.01	2447	257	1	147.2	0
641560	148736	BNPFT	20030314CKV	NEW	CIMARRON COMMUNICATIONS CO, LLC	D	ASPEN	CO	APP	0.25	2668	258	0	156.4	0
631186	140007	BNPFT	20030310AYB	NEW	COLORADO WEST BROADCASTING, INCORPO	D	BASALT	CO	APP	0.01	2671	258	0	156.4	0
627530	138108	BNPFT	20030311APT	NEW	PITKIN COUNTY TRANSLATOR DEPARTMENT	D	OLD SNOWMASS	CO	APP	0.005	2697	258	0	157.2	0
627987	138240	BNPFT	20030311AFI	NEW	PITKIN COUNTY TRANSLATOR DEPARTMENT	D	ASPEN	CO	APP	0.01	3183	257	1	167.6	0

## **Intermediate Frequencies (53 and 54 channels difference):**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
1214246	176250	BNPED	20071018AMT	NEW	UTAH STATE UNIVERSITY OF AGRICULTURE AND	C2	MOAB	UT	CP	2	2758	204	54	77.2	62.2





Facility id: 151525;  
Area of Interference;