

Comprehensive Technical Exhibit
Application for License
K51HF - Driggs, Idaho
Oregon Trail Broadcasting Company
September, 2010

Application for License

The following engineering statement and attached exhibits have been prepared for **Oregon Trail Broadcasting Company** ("Oregon"), licensee of television translator station K51HF at Driggs, Idaho, and are in support of their application for license.¹ This application is being submitted to cover the construction permit under FCC File Number BPTT-20070426AAU.

It was discovered in early 2007 that the parameters contained in the Commission's database for K51HF were incorrect. Although the site location, elevation data, and effective radiated power were correct, the directional antenna pattern was found to be incorrect. Specifically the orientation of the pattern was found to be in error. As discussed in the text of the engineering statement for BPTT-20070426AAU, the "no rotation" box in the Tech-Box portion of Form 346 under BPTT-20020625AAJ was incorrectly checked. The result was that this authorization and the subsequent license were granted specifying the off-the-shelf directional antenna at 0 degrees true instead of the actual 245 degrees true orientation.

As demonstrated in the 2007 construction permit application, modification of the Commission's data to specify the correct antenna rotation would not result in prohibited interference to any other proposed, authorized, or existing facility. This continues to be the case as demonstrated in Exhibits E-1 and E-2 of this technical exhibit. These two exhibits consist of a map illustrating the predicted interference areas and a summary of the population in these areas.

It should be noted that the construction permit for this facility expired on May 16, 2007. The failure to submit this license application in a more timely fashion was simply an oversight of the applicant, the applicant's counsel, and the applicant's engineer. The construction permit, while

¹ The Facility ID for K51HF at Driggs, Idaho is 1266.

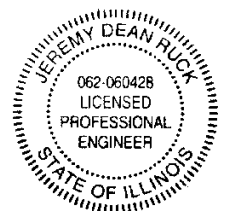
authorizing a change in the orientation, did not actually result in the necessity of performing any construction. As a result, it is respectfully requested that the Staff process this application despite the time elapsed since the expiration date of the construction permit.

The facility was "constructed" in accordance with the terms of the construction permit. As previously stated, the authorized construction was merely to bring the antenna orientation listed in the Commission's database into agreement with the actual antenna orientation. No actual construction was required at the facility.

The construction permit, as issued listed no special conditions or restrictions. The applicant will, however, continue to comply with the portions of the Commission's Rules applicable to its operation.

Affidavit

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2011

Jeremy D. Ruck, PE
September 1, 2010

K51HF.C

BPTT20070426AAU

Latitude: 43-47-18 N

Longitude: 110-56-02 W

ERP: 1.00 kW

Channel: 51Z

Frequency: 695.0 MHz

AMSL Height: 2995.0 m

Elevation: 2987.0 m

Horiz. Pattern: Directional

Vert. Pattern: Yes

Elec Tilt: 0.0

Prop Model: Longley/Rice

Climate: Cont temperate

Conductivity: 0.0050

Dielec Const: 15.0

Refractivity: 301.0

Receiver Ht AG: 10.0 m

Receiver Gain: 0 dB

Time Variability: 10.0%

Sit. Variability: 50.0%

ITM Mode: Broadcast

D.L. Markley & Associates, Inc.

- ☒ K51HF.C
- ☐ 1363431-D.A
- ☐ 1364887-D.A
- ☐ 1366348-D.A
- ☒ 1372379-D.A
- ☐ K50BL
- ☐ K51AK
- ☐ K51DW
- ☐ K51DW-D.C
- ☐ K51FY-D
- ☐ K51GA-D
- ☐ K51HM
- ☒ K51HM-D.C
- ☐ K51HU
- ☐ K51JC
- ☐ K51JM-D.C
- ☐ K51KL.C
- ☐ K51KR
- ☐ K51KS-D
- ☐ K55AI-D.A
- ☐ KSAW-LD-D
- ☐ KULX-CA
- ☐ KULX-CA.C

1372379-D.A

K51KL.C

K51HF.C

K50BL

K51HU

K51HM-D.C

Exhibit E-1

Interference Study

K51HF - Driggs, Idaho

Oregon Trail Broadcasting Company

September, 2010

Scale 1:1,500,000

0 20 40 60 km

Exhibit E-2

Outgoing Interference Population Report

K51HF.C (51Z) Driggs, ID - BPTT20070426AAU

Broadcast Type: NTSC Service: X

Lat: 43-47-18 N Lng: 110-56-02 W ERP: 1.0 kW AMSL: 2995.0 m

TV Outgoing Interference Study

Signal Resolution: 1.0 km

Consider NTSC Taboo: Yes

KWX error points are considered to
be interference free coverage.

Default # of radials computed for contours: 360

Contours calculated using 8 radial HAAT.

LR Profile Spacing Increment: 0.1 km

Masked interference points are being
counted as interference.

Using LPTV/translator D/U rules.

Pop Centroid DB: 2000 US Census (SF1)

Study Date: 9/1/2010

TV Database Date: 8/31/2010

Primary Terrain: V-Soft 3 Second US Terrain

Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Stations Considered:

Call Letters	City	State	Dist	Bear
1363431-D.A (51)	Helena	MT	342.1	345.9
1364887-D.A (51)	Bozeman	MT	209.5	1.4
1366348-D.A (51)	Great Falls	MT	310.3	59.6
1372379-D.A (51)	Hamer	ID	103.4	278.7
K50BL (50N)	Jackson	WY	39.1	157.7
K51AK (51N)	Cody, Etc.	WY	188.6	61.2
K51DW (51N)	Dillon	MT	212.1	320.1
K51DW-D.C (51)	Dillon	MT	212.1	320.1
K51FY-D (51)	Summit County	UT	328.9	188.0
K51GA-D (51)	Logan	UT	261.7	198.6
K51HM (51N)	Soda Springs, Etc.	ID	142.4	205.6
K51HM-D.C (51)	Soda Springs	ID	142.4	205.6
K51HU (51Z)	Pocatello	ID	132.0	240.3
K51JC (51N)	Huntsville	UT	281.5	195.2
K51JM-D.C (51)	Billings	MT	294.8	42.1
K51KL.C (51-)	Rexburg	ID	67.8	271.3
K51KR (51N)	Billings	MT	294.4	40.9
K51KS-D (51)	Malad & Surrounding	ID	216.3	209.2
K55AI-D.A (51)	Tendoy, Baker	ID	245.7	301.8
KSAW-LD-D (51)	Twin Falls	ID	306.1	248.6
KULX-CA (51N)	Ogden	UT	304.5	197.3
KULX-CA.C (51+)	Ogden	UT	304.5	197.3

Call	Area	HUnits	Contour	Masked	Ix	Unmasked	Ix	%
1363431-D.A (51)	0.0	0	58,595		0		0	0.0
1364887-D.A (51)	0.0	0	78,354		0		0	0.0
1366348-D.A (51)	0.0	0	3,074		0		0	0.0
1372379-D.A (51)	1.8	0	793		0		0	0.0
K50BL (50N)	0.0	0	9,635		0		0	0.0
K51AK (51N)	0.0	0	8,008		0		0	0.0
K51DW (51N)	0.0	0	3,814		0		0	0.0
K51DW-D.C (51)	0.0	0	7,227		0		0	0.0
K51FY-D (51)	0.0	0	506,965		0		0	0.0
K51GA-D (51)	0.0	0	109,821		0		0	0.0
K51HM (51N)	0.0	0	5,959		0		0	0.0
K51HM-D.C (51)	0.9	0	12,498		0		0	0.0
K51HU (51Z)	0.0	0	8,102		0		0	0.0
K51JC (51N)	0.0	0	1,606		0		0	0.0
K51JM-D.C (51)	0.0	0	130,616		0		0	0.0
K51KL.C (51-)	0.0	0	27,834		0		0	0.0
K51KR (51N)	0.0	0	62,887		0		0	0.0
K51KS-D (51)	0.0	0	5,283		0		0	0.0
K55AI-D.A (51)	0.0	0	3,435		0		0	0.0
KSAW-LD-D (51)	0.0	0	98,511		0		0	0.0
KULX-CA (51N)	0.0	0	153,061		0		0	0.0
KULX-CA.C (51+)	0.0	0	169,179		0		0	0.0

	Housing Units	Population
Idaho		
Jefferson County		
Total	6,287	19,155
1372379-D.A (51)	0	0