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## **Engineering Statement**

**August 2004**

This Engineering Statement has been prepared on behalf of Combined Communications, Inc. ("Combined"), permittee of LPTV station K41HA (Channel 41+) at Bend, Oregon. This allocation study has been prepared in connection with an application for power increase. It is proposed to modify K41HA to increase the maximum lobe ERP from 6.5 kW to 8.9 kW.

### **Cochannel**

Study has been made of all cochannel operations within 300 km of the proposed K41HA operation. None are close enough to require detailed allocation study maps in the instant application.

### **First-Adjacent**

There are two first-adjacent-channel translators in the vicinity: K66AZ Prineville (Ch 40 permit) and K42BR Terrebonne-Bend. The attached allocation study map demonstrates that the proposed K41HA facility results in a small amount of overlap caused to K66AZ (Ch 40 permit). Detailed Longley-Rice study has been made of the potential for interference caused to K66AZ (Ch 40 permit). The attached interference study maps depict the results of this analysis.

Interference is predicted to just 27 persons within the K66AZ (Ch 40 permit) 74 dBu contour which receive at least a 74 dBu F(50,50) signal from that facility. This figure represents just 0.06% of the K66AZ (Ch 40 permit) service population of 43,276 persons. Since this is less than 0.5% it is considered to round to zero per Commission policy.

**N+7**

There are no analog television stations on Channel 48 within 100 km of the proposed translator.

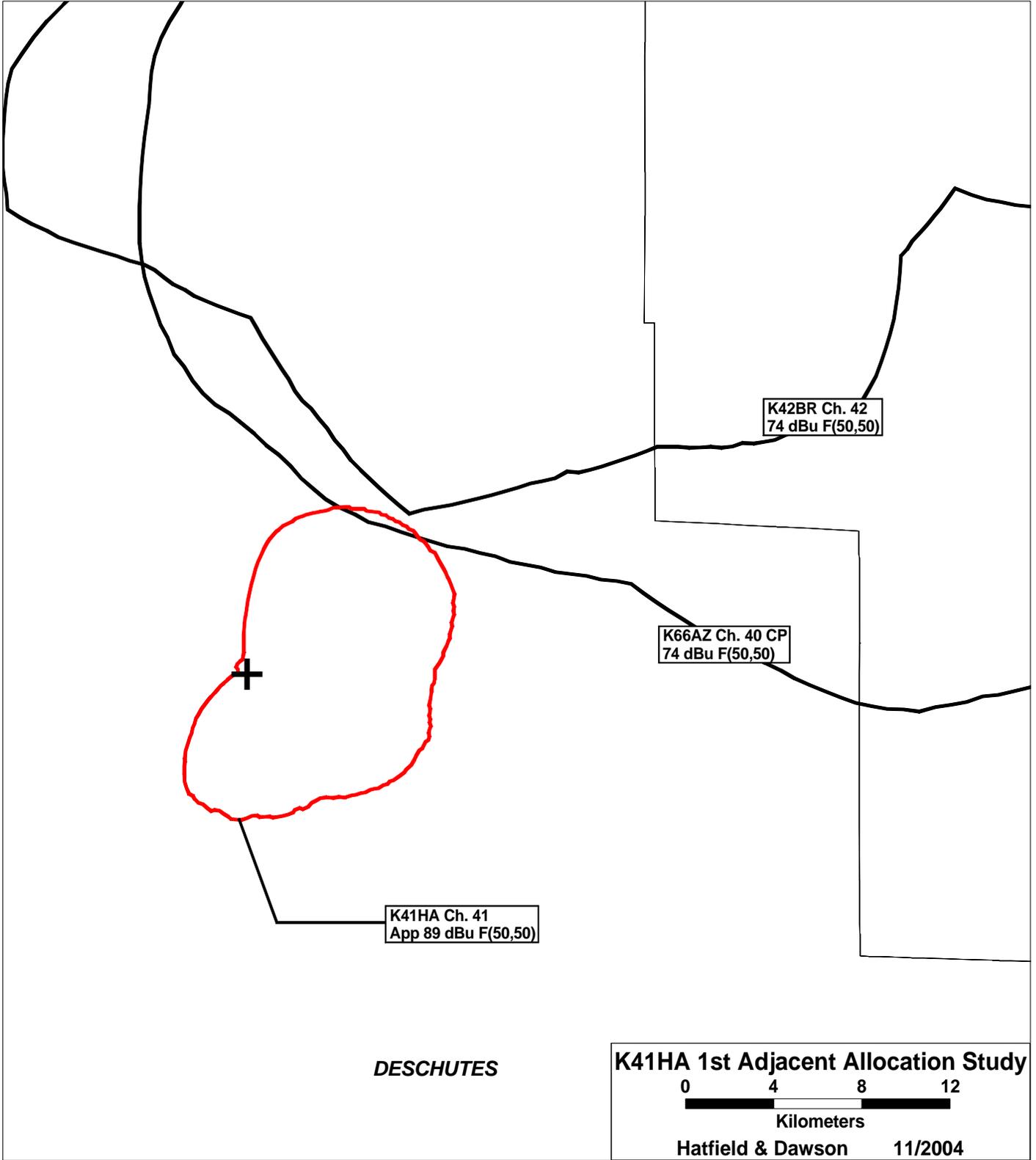
**N-14 and N-15**

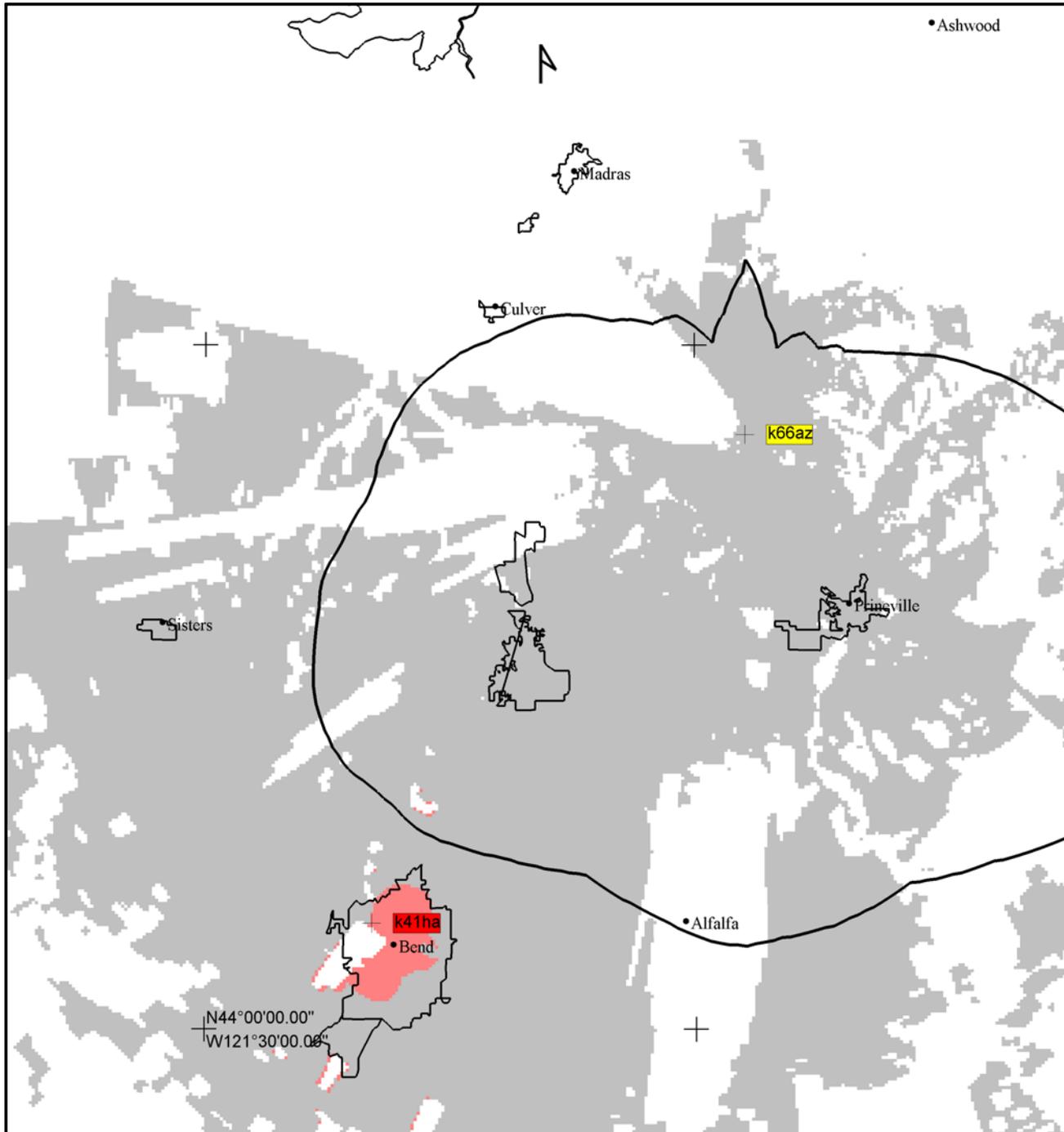
There are no analog television on Channels 26 or 27, or translator stations on Channel 26, which are close enough to require detailed study.

Based on the foregoing allocation and interference study, it is believed that the proposed K41HA facility can operate without risk of interference to other stations.

November 17, 2004

Erik C. Swanson





SIGNAL™: K41HA Bend

Prop. model: Longley-Rice v1.2.2  
 Time: 50.0% Loc.: 50.0%  
 Prediction Confidence Margin: 0.0dB  
 Climate: Continental Temperate  
 Land use (clutter): none  
 Atmospheric Abs.: none  
 K Factor: 1.333

Sites

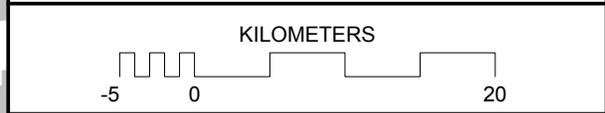
Site: k41ha  
 N44°04'39.00" W121°19'57.00" 1283.0 m  
 k41ha \* Tx.Ht.AGL: 53.0 m Total ERPd: 9.49 dBkW  
 Model: 1 directional-horizontal/120.0° 632.0000 MHz

Site: k66az  
 N44°26'05.00" W120°57'06.00" 1658.0 m  
 k66az Tx.Ht.AGL: 7.0 m Total ERPd: 14.33 dBkW  
 Model: 1 directional-horizontal/0.0° 626.0000 MHz

C/I ratio Primary Group TXs to Second Group TXs

█	>	-15.0 dB
█	<	-15.0 dB

Display threshold level: -57.1 dBmW  
 RX Antenna - Type: OMNI  
 Height: 9.1 m AGL Gain: 0.00 dBd



**K41HA Int Study vs K66AZ Ch40 CP**  
 Hatfield & Dawson

Exhibit Nov 2004