ENGINEERING STATEMENT

MINOR MODIFICATION

FM TRANSLATOR K294BT

FAC Id # 141264

RAPID CITY, SOUTH DAKOTA

GENERAL

I have been retained to prepare the required engineering statement for the above-captioned FM translator. Aasen Publishing, Inc., licensee of K294BT, proposes to relocate the licensed operations of FM translator K294BT. Aasen Publishing, Inc., is the licensee of Radio Station KIMM(AM), Rapids City, South Dakota.

TRANSMITTER LOCATION

The proposed transmitter site is uniquely describes as:

North Latitude 44 degrees 04 minutes 00 seconds

West Longitude 103 degrees 15 minutes 01 seconds

FCC Antenna Registration Number: 1042276

ALLOCATION REVIEW

Translator K294BT currently serves as a Fill-in for AM station KIMM(AM). The Fill-in currently operates on Channel 294 with 250 watts at an antenna height above mean seal level of 1222 meters and an antenna height above ground level of 24 meters.[1]

[1] The proposed translator site is inside the 2 mV/m contour and within 25 miles of AM station KIMM-AM in full compliance with the rules adopted in MB Docket No. 07-172 entitled *Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations.*

Translator station K294BT has operated without interference to any existing FM broadcast station or translator. K294BT operates on a third/second-adjacent channel to station, KSLT(FM), Rapid City, SD and KZLK(FM) Rapid City, SD.[2] The proposed transmitter site change is not expected to change the *status quo*.

An FM allocation study was performed to analyze the proposed K294BT transmitter site. The FM allocation study examined co-channel, adjacent channels (1st, 2nd, and 3rd), and intermediate frequencies (53rd and 54th) options. Channel 294D at the proposed transmitter site continues to be the best channel available which would maintain a spectrum *status quo* in the market.

KSLT currently operates on Ch. 297C with a construction permit to relocate to channel 296C; same site and ERP. The site is 54.9 km (34.17 miles) northwest of the K294BT proposed site. KSLT also has a booster on channel 297 operating with 2.4 kW located just 2.88 km (1.79 miles) North of K294BT proposed site. Assuming KSLT will move its current on-channel booster to Channel 296 after it implements its outstanding construction permit, the proposed Channel 294D translator operations will have no more of an impact on the KSLT operations.

Both the KSLT main transmitter and its outstanding construction permit place a 75 dBu contour at the proposed translator site. Utilizing the Undesired-to-Desired ratio of 40 dB, the potential interfering contour is 115 dBu. At 250 watts, the K294BT translator on channel 294D extends approximately 650 feet from the translator antenna. The USGS topographical map provided indicates no population within 650 feet of the transmitting antenna. The site is very

[2] Utilizing a U/D Ratio analysis, K294BT was authorized operation on a third/second adjacent channel to KSLT(FM), Spearfish, South Dakota and KZLK(FM), Rapid City, South Dakota. The U/D Ratio interference analysis demonstrated "lack of population" within the predicted interference area. *See* Construction Permit Application, FCC File No: BPFT-20090612ACN. Since July 2009, K294BT has operated with no apparent objectionable interference to KSLT(FM) and/or KZLK(FM).

remote and the topographical features drop off rapidly.

Additionally, the KSLT-FM1 booster places a 96 dBu contour at the proposed translator site. Utilizing the Undesired-to-Desired ratio of 40 dB, the potential interfering contour is 136 dBu. At 250 watts, the K294BT translator on channel 294D the interference potential is 58 feet from the translator transmitting antenna. Any potential interference will not reach the ground. This is a U/D improvement from the current K294BT licensed operations.

Furthermore, the KZLK main transmitter places a 140 dBu contour at the proposed translator site. Utilizing the Undesired-to-Desired ratio of 40 dB, the potential interfering contour is 180 dBu. At 250 watts, the K294BT translator interference potential under a "free space" analysis will be only feet from the antenna and will not reach the ground. This is an U/D improvement from the current K294BT licensed operations.

The proposed K294BT modification is in full compliance with the FCC Rules and Regulations. This statement and attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct.

DATED: December 2010 _____signed_____
Edward P. De La Hunt