



**Refuge Media Group**  
 425 W Superior Street,  
 Duluth, MN 55802-1404

**Exhibit 12, Page 1**  
**Allocation Study for channel 285FT**  
 (Brookings, SD Proposal)  
 1/29/2003

Channel: 285 (104.9 MHz)  
 Antenna: Cablewave ECFM-1 1-bay (non-directional)  
 ERP: 0.001 kW (H & V)  
 HAAT: <30 m

North Lat: 44° 23' 1"  
 West Lon: 96° 44' 22"

**Note:** Only stations within 140 km of co-channel, 114 km for 1<sup>st</sup> adj, 95 km for 2<sup>nd</sup>&3<sup>rd</sup> adj., and 29 km for IF separations are listed. These distances were calculated, pursuant to §74.1204(a)(3) for a maximum translator (250 watts at 107 m HAAT) and a maximum Class C station (100,000 watts@ 600 m HAAT) as follows:

Co-Channel: sum of distance to Max translator 40dBu F(50,10) contour and dist. to Max Class C 60 dBu F(50,50) contour:  
 45.581 km + 91.818 km = 137.399 km

1<sup>st</sup> Adjacent: sum of distance to Max translator 54dBu F(50,10) contour and dist. to Max Class C 60 dBu F(50,50) contour:  
 19.961 km + 91.818 km = 111.779 km

2<sup>nd</sup> & 3<sup>rd</sup> Adjacent: sum of dist. to Max translator 100 dBu F(50,10) contour and dist. to Max Class C 60 dBu F(50,50) contour:  
 1.109 km + 91.818 km = 92.927 km

I.F. separation requirements: Pursuant to §74.1204(g), translators with over 100 watts are treated as Class A stations. The maximum distance is determined by §73.207 comparing a class A station with a class C station which is 29 km.

<u>Call Sign/City</u>	<u>Channel/Freq.</u>	<u>ERP (kW)</u>	<u>HAAT</u>	<u>Lat./Lon.</u>	<u>Distance</u>	<u>Req. Dist.</u>	<u>Clear by</u>
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**Co channel Stations within 140 km:**

-none-

**1<sup>st</sup> Adjacent Stations within 114 km:**

KKLS-FM	284C1 (lic)	100 H	299 m	43° 43' 46"NL	77.9 km	74.8 km	3.1 km
Sioux Falls, SD	104.7 MHz	100 V	299 m	97° 05' 14"WL			
KARL	286C2 (lic)	45 H	153 m	44° 19' 32" NL	69.5 km	54.2 km	15.3 km
Tracy, MN	105.1 MHz	45 V	153 m	95° 52' 19"WL			

**2<sup>nd</sup> Adjacent Stations Within 95 km:**

-none-

**3<sup>rd</sup> Adjacent Stations Within 95 km:**

KKSD	282C1 (lic)	100 H	299 m	45° 10' 31" NL	90.1 km	72.4 km	17.7 km
Milbank, SD	104.3 MHz	100 V	299 m	96° 59' 15"WL			

**IF Stations Within 29 km:**

- minimum distance separations not required for translators with less than 100 watts ERP pursuant to § 74.1204(g) -

HAAT calculated in accordance to § 73.313 (d).