

**Goldman Engineering Management  
Auburn, CA**

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K286AG

**LICENSE MODIFICATION APPLICATION**

This application is being filed on behalf of The Evans Broadcast Company, Inc. and requests a minor modification to the license for K286AG, BLFT-19981013TN, Facility ID 81843.

The purpose of this application is to change the location of the facility, the antenna, and change the primary station to KKFT (FM), facility ID 9136. The KKFT HD3 programming will be duplicated on the K286AG translator.

NOTE: This application is being filed concurrently with an application for K285HG to modify their antenna so that the proposed K286AG and K285HG can coexist.

**Facilities Proposed**

Location (NAD83)	39° 15' 28.6" N Latitude, 119° 42' 40.4" W Longitude
Channel	286D (105.1MHz)
Tower Overall AGL Height-	57m
Tower ASR	NONE (Existing tower)
Proposed Antenna	Kathrein-BCA CL-FMV-2 (Horiz boom array)
Antenna AGL Height-	36m
Site AMSL Height-	2,263m
COR AMSL Height	2,299m
ERP	250w DIRECTIONAL (SEE EXHIBIT A)

**ALLOCATION**

A channel study is included as Exhibit B demonstrating compliance with 74.1204(a). Exhibit C demonstrates relationships to other nearby facilities. Exhibit C also demonstrates compliance with 74.1201(g). The 60dBu contour of the proposed K286AG will be contained entirely within the 60dBu contour of KKFT. Exhibit D demonstrates compliance with 74.1204(d). There will be no location at ground level where interference will exist to either KDOT (283D) or KOZZ-FM (289C), 3<sup>rd</sup> adjacent stations.

## RF Exposure Calculations

As stated above, the proposed K286AG site would be co-located on the existing KKFT tower at 36m AGL. The environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent; therefore, those issues have not been addressed.

Using the FCC program "FM Model"<sup>1</sup>, it was calculated that the proposed antenna contributes approximately 6.9 $\mu$ W/cm<sup>2</sup> or 3.5 % of the total allowable 200  $\mu$ W/cm<sup>2</sup>. The maximum was found to be 7.8 meters from the base of the tower.

Based upon the above evaluation, the proposed antenna will not cause the RF density at the tower site to exceed public exposure limits and contributes less than 5% of the MPE at ground level. Based upon the preceding, this proposed facility is excluded from further Environmental Assessment under 47CFR 1.1306 and 1.1307.

## CERTIFICATION

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direct supervision, and that they are true and correct to the best of his knowledge and belief.



Bertram S. Goldman

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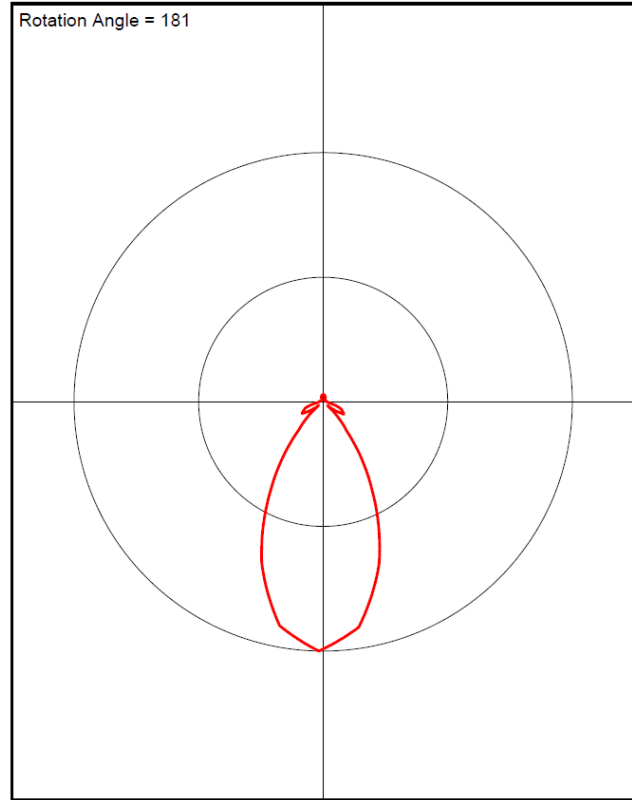
<sup>1</sup> <https://www.fcc.gov/general/fm-model>

# EXHIBIT A- ANTENNA PATTERN

## K286AG Prop Antenna Pattern

Post-Rotation Antenna Pattern....

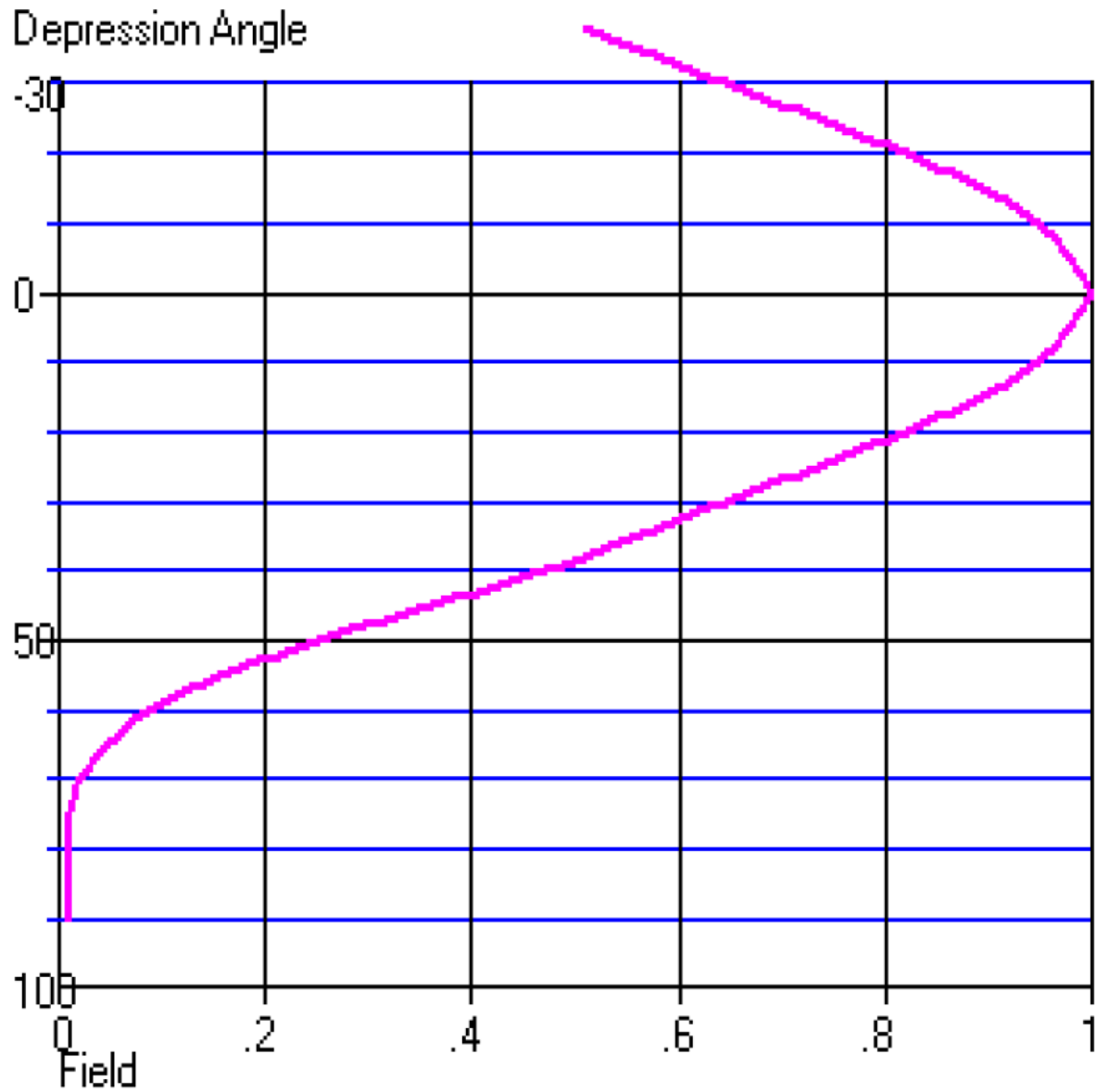
Azimuth (deg)	Relative Field
0.0	0.0298
5.0	0.0292
10.0	0.0282
15.0	0.026
20.0	0.0235
25.0	0.0198
30.0	0.0158
35.0	0.013
40.0	0.0105
45.0	0.01
50.0	0.01
55.0	0.01
60.0	0.01
65.0	0.0108
70.0	0.0118
75.0	0.0128
80.0	0.0138
85.0	0.0144
90.0	0.0149
95.0	0.0186
100.0	0.0231
105.0	0.0444
110.0	0.0699
115.0	0.0838
120.0	0.0948
125.0	0.0674
130.0	0.0304
135.0	0.0734
140.0	0.1364
145.0	0.2514
150.0	0.3794
155.0	0.5186
160.0	0.6606
165.0	0.7794
170.0	0.8924
175.0	0.949
180.0	0.9915
185.0	0.966
190.0	0.9235
195.0	0.8246
200.0	0.7116
205.0	0.5754
210.0	0.4334
215.0	0.3026
220.0	0.1746
225.0	0.0986
230.0	0.0356
235.0	0.0526
240.0	0.0896
245.0	0.0882
250.0	0.0772
255.0	0.0546
260.0	0.0291
265.0	0.0204
270.0	0.0159
275.0	0.0146
280.0	0.0141
285.0	0.0132
290.0	0.0122
295.0	0.0112
300.0	0.0102
305.0	0.01
310.0	0.01
315.0	0.01



320.0	0.01
325.0	0.0104
330.0	0.0109
335.0	0.0158
340.0	0.0218
345.0	0.025
350.0	0.0275
355.0	0.0288

# EXHIBIT A1- VERTICAL ANTENNA PATTERN

Single-Level Kathrein/ Scala CL-FM-V



## EXHIBIT B CHANNEL STUDY

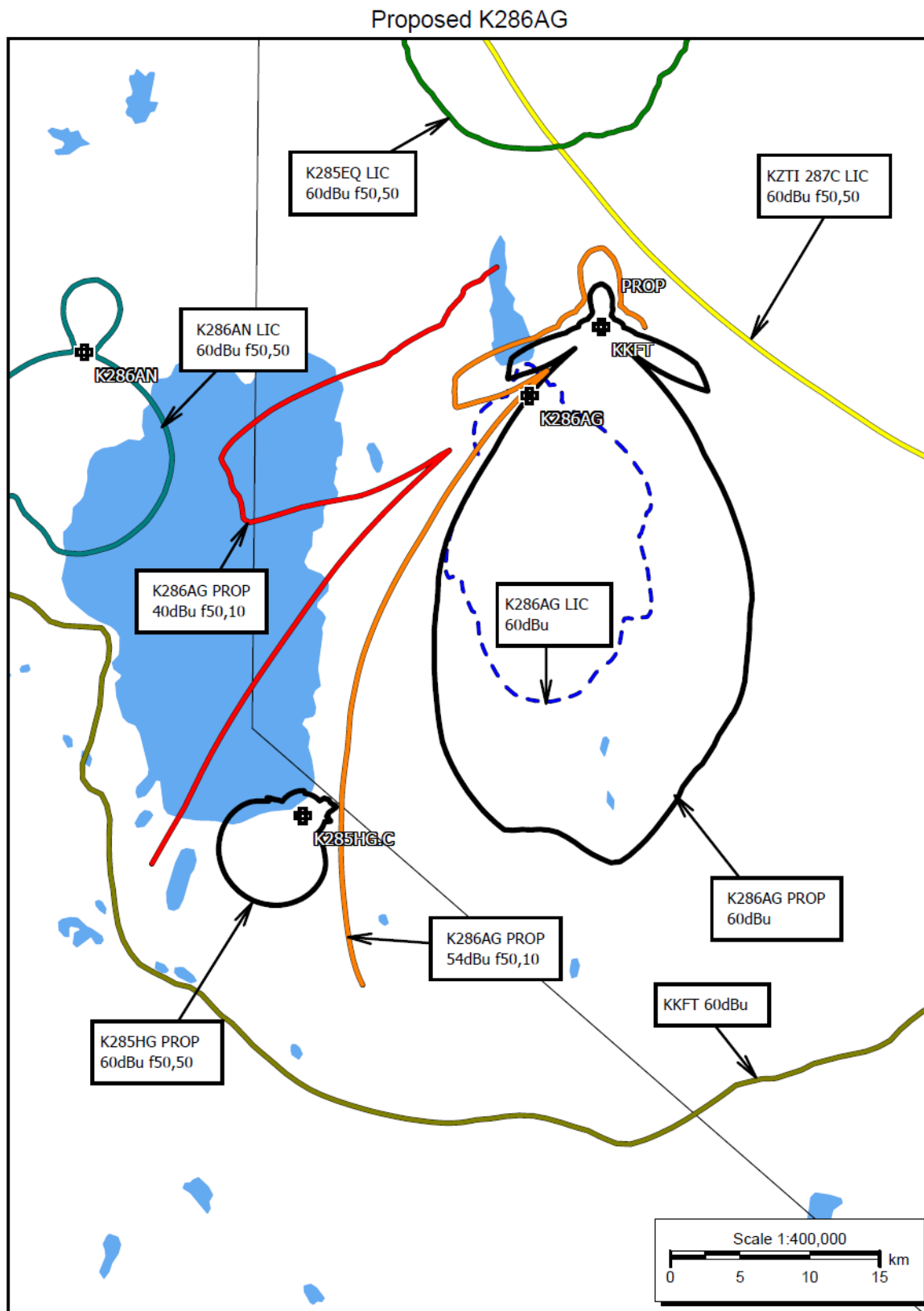
ComStudy 2.2 search of channel 286 (105.1 MHz Class D) at 39-15-32.1 N, 119-42-40.9 W.

CALL	CITY	ST CHN CL	DIST	SEP	BRNG	CLEARANCE
KDOT	RENO	NV 283 C	16.07	0.00	292.2	-35.59 dB Exhibit D
KOZZ-FM	RENO	NV 289 C	16.07	0.00	292.2	-35.59 dB Exhibit D
K285HG	SOUTH LAKE TAHOE	CA 285 D	41.08	0.00	211.3	2.75 dB AS PROP*
KZTI	FALLON STATION	NV 287 C	99.30	0.00	42.7	1.99 dB
K285EQ	RENO	NV 285 D	36.86	0.00	348.2	1.67 dB
K286AN	TRUCKEE	CA 286 D	37.04	0.00	267.1	1.40 dB
KZTI-FM1	RENO	NV 287 D	36.97	0.00	347.8	4.35 dB
K232EA	CARSON CITY	NV 232 D	7.15	0.00	225.4	7.2
KNCI	SACRAMENTO	CA 286 B	137.85	0.00	240.5	12.76 dB
KUUB	SUN VALLEY	NV 233 C2	36.87	15.00	348.3	21.9
KKBZ	AUBERRY	CA 286 B1	257.20	0.00	175.6	23.96 dB

\* K285HG is filing concurrently with a different antenna compliant as shown

LMS data as of 3/7/2021

EXHIBIT C- 74.1204(a), 74.1201(g) Compliance



## EXHIBIT D- 74.1204 (d) Compliance

K286AG-P Carson City, NV, Showing Protection to KDOT , Channel: 283,  
 KOZZ-FM, 289C (stations collocated, same power)  
 Geographic Coordinates: N. 391528.6 W. 1194240.4  
 74.1204(d) Study - Using NED 03 SEC Terrain Database  
 Translator or LPFM Maximum Licensed ERP = 0.25 kW, Channel: 286  
 Translator or LPFM Antenna Height AG = 36 meters  
 K286AG-P Antenna Azimuth Model = Vertical Model Name = CL-FM\_0098-MHZ\_VPOL\_000DT

Protected Station's Contour = 95.45594 dBu  
 Translator's or LPFM's full Interference contour 135.45594

Review Azimuth = 181 Degrees True  
 Horizontal Relative Field at Review Azimuth = 1.000 (Worst-case)  
 Translator/LPFM ERP on the horizontal at Review Azimuth = 0.25 kW  
 Distance between stations = 16.1 km  
 Protected Station= KDOT, 25 kW, 2967 M meters COR AMSL  
 \* NOTE- IDENTICAL RELATIONSHIP TO KOZZ-FM (289C)

Depression Angle From Degree(Deg) (m)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground
00.00	1.0	1.0	0.2500	018.7143	018.7143	036.000
05.00	0.98	1.0	0.2401	018.3400	018.2702	034.402
10.00	0.95	1.0	0.2256	017.7786	017.5085	032.913
15.00	0.895	1.0	0.2003	016.7493	016.1786	031.665
20.00	0.82	1.0	0.1681	015.3457	014.4202	030.751
25.00	0.735	1.0	0.1351	013.7550	012.4663	030.187
30.00	0.645	1.0	0.1040	012.0707	010.4535	029.965
35.00	0.563	1.0	0.0791	010.5268	008.6230	029.962
40.00	0.47	1.0	0.0552	008.7957	006.7379	030.346
45.00	0.36	1.0	0.0324	006.7371	004.7639	031.236
50.00	0.25	1.0	0.0156	004.6786	003.0073	032.416
55.00	0.155	1.0	0.0060	002.9007	001.6638	033.624
60.00	0.085	1.0	0.0018	001.5907	000.7954	034.622
65.00	0.045	1.0	0.0005	000.8421	000.3559	035.237
70.00	0.02	1.0	0.0001	000.3743	000.1280	035.648
75.00	0.01	1.0	0.0000	000.1871	000.0484	035.819
80.00	0.01	1.0	0.0000	000.1871	000.0325	035.816
85.00	0.01	1.0	0.0000	000.1871	000.0163	035.814
90.00	0.01	1.0	0.0000	000.1871	000.0000	035.813

- Lowest occurrence of interfering contour to KDOT(283C) or KOZZ-FM (289C)