

## **Technical Report K285FW Minor Modification**

This technical report is submitted for a minor modification to K285FW at King City, CA, FCC file no. BLFT-20120404AAJ. Changes in the tower site, COR AGL and antenna are requested. The facility will continue to serve as a fill-in to rebroadcast the primary signal of KRKC(AM) 1490 kHz at King City, CA, FCC facility I.D. 54554.

The following exhibits are provided for the FCC form 349 application:

- E-1 K285FW Overlap Study
- E-2 TOWAIR Determination
- E-3 Directional Antenna Pattern
- E-4 12 Radial HAAT Calculation
- E-5 K285FW 60 F(50-50) dBu Contour Plots
- E-6 Antenna Vertical Pattern and Tabulation

### **K285FW Modification:**

Exhibit E-1 shows the K285FW modification will not cause any interference overlap to existing facilities relocated to the 52 meter tower at coordinates:

**35 57 04.25N 121 00 06.25W NAD 83.**

A TOWAIR determination (exhibit E-2) shows the tower does not require registration. K285FW will operate at 0.250 kW ERP using a Nicom BLK5-V single bay directional antenna mounted at a 45 degree slant and rotated at a 340 degree azimuth (exhibit E-3) and mounted at a COR AGL of 23 meters, 870.3 meters AMSL, 530 meters HAAT (exhibit E-4). The facility overlaps the current K285FW licensed facility, and is contained within a 25 mile/40 km radius from the primary KRKC(AM) daytime site and has less than 50% overlap to K228FT, which also serves as a fill in for the primary KRKC(AM) facility (exhibit E-5).

# Anderson Associates

Broadcast Consultants  
1519 Euclid Avenue  
Bowling Green, KY 42103

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## **RF Exposure Calculation:**

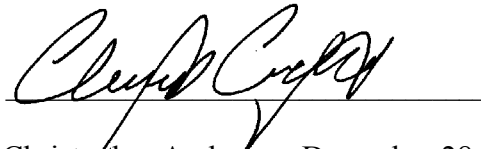
The RF contribution was calculated using the formula from the OET Bulletin 65:

$$S \text{ (RF in microwatts/cm}^2\text{)} = \frac{33.4 \times F^2 \times (H \text{ ERP} + V \text{ ERP in watts})}{R^2 \text{ (height of radiation center in meters}^2\text{)}}$$

Using the vertical (F) factor of 0.43 at 45 degrees (exhibit E-6), the RF is calculated to be 7.00  $\mu\text{W/cm}^2$  to the ground, which is below 5% of the 200  $\mu\text{W/cm}^2$  maximum permissible for general public exposure, allowing exclusion from consideration.

## **Conclusion:**

It is concluded that the modification of K285FW complies with all Commission rules and policies.



Christopher Anderson December 28, 2020  
andersce@bham.rr.com  
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## E-1 K285FW Mod. Overlap Study

REFERENCE		CH#	285D	-	104.9 MHz,	Pwr=	0.25 kW	DA,	HAAT=	530.0 M	COR=	870.3 M	DISPLAY DATES	
35 57 04.25 N.		Average Protected F(50-50)= 30.03 km												
121 00 06.25 W.		Standard Directional												
CH	CALL	TYPE	ANT	AZI	DI ST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*			
CITY		STATE	<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)					
285D	K285FW	LIC DCN	326.0	43.30	36 16 26.80	0.250								
King City		CA	145.9	BLFT20120404AAJ	121 16 18.70	81	377	---	Reference---					
283B	KSTT-FM	LIC _CN	154.5	72.62	35 21 39.90	4.700	3.8	57.6	61.5	13.8				
Atascadero		CA	334.7	BLH20021017AAU	120 39 24.60	440	778	Agm	Cal i forni a, Inc.					
285D	K285EW	LIC _CN	156.8	67.35	35 23 37.90	0.010	39.2	11.4	20.8	25.0				
San Luis Obispo		CA	337.0	BMLFT20050620ABQ	120 42 33.60	568	864	CSN	International					
287A	KCJZ	LIC _CN	186.5	47.75	35 31 27.90	6.000	2.2	15.8	38.4	22.2				
Cambria		CA	6.5	BLH20140620AAD	121 03 42.70	52	280	Adelman	Investments, LLC					
286A	KOCN	LIC _CN	313.7	97.22	36 33 08.80	1.800	41.8	11.7	34.4	33.7				
Pacific Grove		CA	133.2	BLH19950801KD	121 47 20.80	183	416	Ihm	Licenses, LLC					
288D	K288B0	LIC DVN	144.1	44.52	35 37 34.90	0.010	0.0	0.5	37.5	39.6				
Paso Robles		CA	324.3	BLFT20170404AAJ	120 42 46.60		440	CSN	International					
284D	K284CZ	CP DCN	328.6	92.50	36 39 35.90	0.175	13.3	10.4	51.5	43.4				
Carmel Valley		CA	148.3	BNPFT20181101AAS	121 32 32.80		144	El	Sembrador Mini stries					
285A	KCRZ	LIC ZCN	79.8	193.85	36 14 31.70	3.100	127.3	50.6	46.3	83.2				
Tipton		CA	261.0	BLH20130314ACZ	118 52 26.50	141	877	Momentum	Broadcasting Lp					

Terrain database is GLOBE 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone= East Zone 2A, Co to 3rd adjacent.  
All separation margins (if shown) include rounding.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
\*\*\*affixed to 'IN' or 'OUT' values = site inside restricted contour.  
« = Station meets FCC minimum distance spacing for its class.

## TOWAIR Determination Results

### \*\*\* NOTICE \*\*\*

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

#### DETERMINATION Results

**Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.**

#### Your Specifications

##### NAD83 Coordinates

Latitude	35-57-04.3 north
Longitude	121-00-06.3 west

##### Measurements (Meters)

Overall Structure Height (AGL)	52
Support Structure Height (AGL)	0
Site Elevation (AMSL)	847.3

##### Structure Type

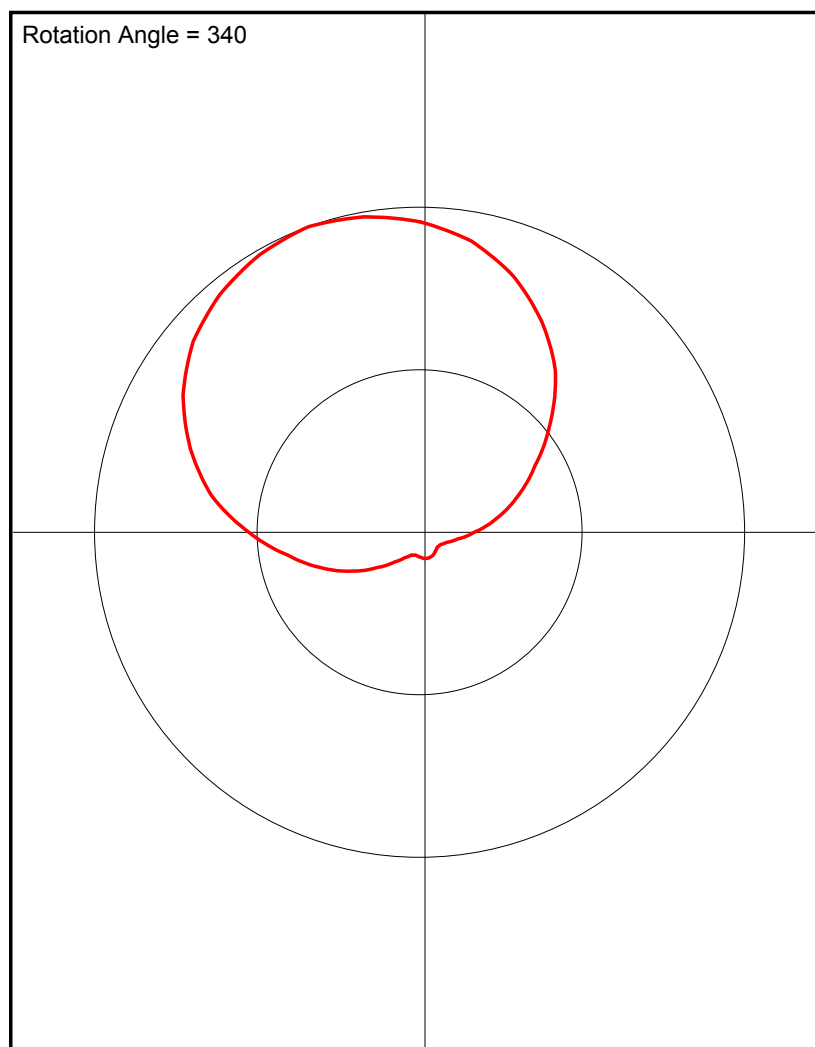
GTOWER - Guyed Structure Used for Communication Purposes

#### [Tower Construction Notifications](#)

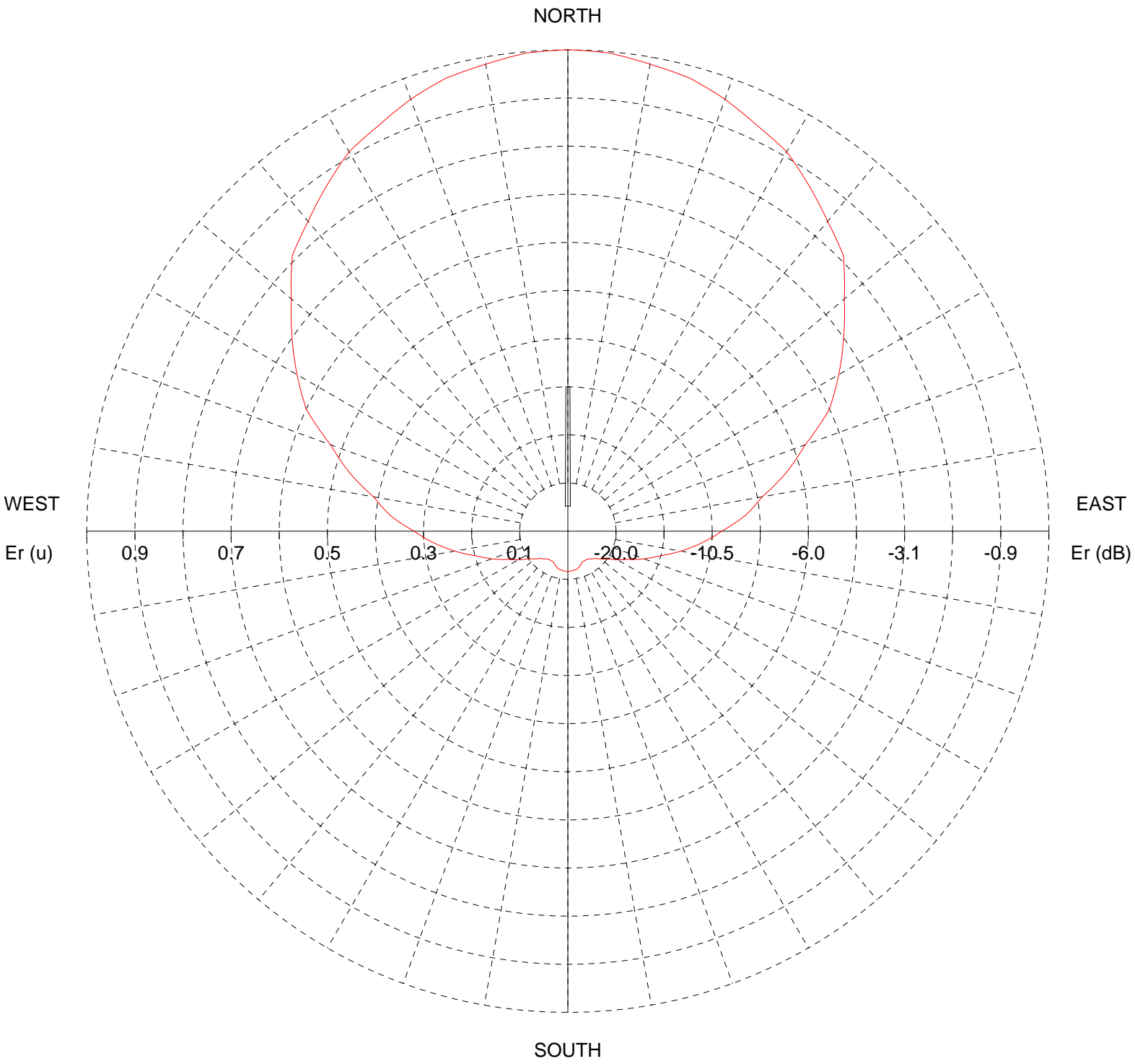
Notify Tribes and Historic Preservation Officers of your plans to build a tower.

# E-3 K285FW Mod. Antenna Pattern

Azimuth (deg)	Relative Field
0.0	0.955
10.0	0.91
20.0	0.84
30.0	0.75
40.0	0.65
50.0	0.525
60.0	0.41
70.0	0.32
80.0	0.239
90.0	0.168
100.0	0.119
110.0	0.09
120.0	0.075
130.0	0.071
140.0	0.076
150.0	0.082
160.0	0.084
170.0	0.082
180.0	0.076
190.0	0.071
200.0	0.075
210.0	0.09
220.0	0.119
230.0	0.168
240.0	0.239
250.0	0.32
260.0	0.41
270.0	0.525
280.0	0.65
290.0	0.75
300.0	0.84
310.0	0.91
320.0	0.955
330.0	0.985
340.0	1.0
350.0	0.985



Horizontal diagram



0.0° depres. (Total antenna), Gain (dBd): 6.20 ERP T.max (KW): 4.169 ERP E

TX station: BLK5 SINGLE BAY VERTICAL

Site name:

Frequency: 100.00 MHz

**Horizontal diagram at 0.0° depres. (Total antenna)**

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
0.0	100.0	3.24	60.0	65.0	1.37	120.0	11.9	0.05
1.0	99.9	3.23	61.0	64.0	1.33	121.0	11.5	0.04
2.0	99.9	3.23	62.0	63.0	1.28	122.0	11.1	0.04
3.0	99.8	3.22	63.0	62.0	1.24	123.0	10.7	0.04
4.0	99.8	3.22	64.0	61.0	1.20	124.0	10.3	0.03
5.0	99.7	3.22	65.0	60.0	1.16	125.0	9.9	0.03
6.0	99.5	3.20	66.0	58.5	1.11	126.0	9.8	0.03
7.0	99.2	3.19	67.0	57.0	1.05	127.0	9.6	0.03
8.0	99.0	3.17	68.0	55.5	1.00	128.0	9.4	0.03
9.0	98.7	3.15	69.0	54.0	0.94	129.0	9.2	0.03
10.0	98.5	3.14	70.0	52.5	0.89	130.0	9.0	0.03
11.0	98.3	3.13	71.0	51.4	0.85	131.0	8.8	0.02
12.0	98.1	3.11	72.0	50.3	0.82	132.0	8.6	0.02
13.0	97.9	3.10	73.0	49.2	0.78	133.0	8.4	0.02
14.0	97.7	3.09	74.0	48.1	0.75	134.0	8.2	0.02
15.0	97.5	3.08	75.0	47.0	0.71	135.0	8.0	0.02
16.0	97.1	3.05	76.0	45.8	0.68	136.0	7.9	0.02
17.0	96.7	3.03	77.0	44.6	0.64	137.0	7.8	0.02
18.0	96.3	3.00	78.0	43.4	0.61	138.0	7.7	0.02
19.0	95.9	2.98	79.0	42.2	0.58	139.0	7.6	0.02
20.0	95.5	2.95	80.0	41.0	0.54	140.0	7.5	0.02
21.0	95.0	2.92	81.0	40.2	0.52	141.0	7.4	0.02
22.0	94.5	2.89	82.0	39.4	0.50	142.0	7.3	0.02
23.0	94.0	2.86	83.0	38.6	0.48	143.0	7.3	0.02
24.0	93.5	2.83	84.0	37.8	0.46	144.0	7.2	0.02
25.0	93.0	2.80	85.0	37.0	0.44	145.0	7.1	0.02
26.0	92.6	2.77	86.0	36.0	0.42	146.0	7.1	0.02
27.0	92.2	2.75	87.0	35.0	0.40	147.0	7.1	0.02
28.0	91.8	2.73	88.0	34.0	0.37	148.0	7.1	0.02
29.0	91.4	2.70	89.0	33.0	0.35	149.0	7.1	0.02
30.0	91.0	2.68	90.0	32.0	0.33	150.0	7.1	0.02
31.0	90.3	2.64	91.0	31.2	0.31	151.0	7.1	0.02
32.0	89.6	2.60	92.0	30.4	0.30	152.0	7.1	0.02
33.0	88.9	2.56	93.0	29.6	0.28	153.0	7.1	0.02
34.0	88.2	2.52	94.0	28.8	0.27	154.0	7.1	0.02
35.0	87.5	2.48	95.0	28.0	0.25	155.0	7.1	0.02
36.0	86.8	2.44	96.0	27.1	0.24	156.0	7.2	0.02
37.0	86.1	2.40	97.0	26.3	0.22	157.0	7.3	0.02
38.0	85.4	2.36	98.0	25.5	0.21	158.0	7.4	0.02
39.0	84.7	2.32	99.0	24.7	0.20	159.0	7.5	0.02
40.0	84.0	2.28	100.0	23.9	0.18	160.0	7.6	0.02
41.0	83.4	2.25	101.0	23.1	0.17	161.0	7.7	0.02
42.0	82.8	2.22	102.0	22.3	0.16	162.0	7.7	0.02
43.0	82.2	2.19	103.0	21.4	0.15	163.0	7.8	0.02
44.0	81.6	2.15	104.0	20.6	0.14	164.0	7.9	0.02
45.0	81.0	2.12	105.0	19.8	0.13	165.0	8.0	0.02
46.0	79.8	2.06	106.0	19.2	0.12	166.0	8.1	0.02
47.0	78.6	2.00	107.0	18.6	0.11	167.0	8.1	0.02
48.0	77.4	1.94	108.0	18.0	0.11	168.0	8.1	0.02
49.0	76.2	1.88	109.0	17.4	0.10	169.0	8.2	0.02
50.0	75.0	1.82	110.0	16.8	0.09	170.0	8.2	0.02
51.0	74.0	1.77	111.0	16.2	0.09	171.0	8.2	0.02
52.0	73.0	1.72	112.0	15.6	0.08	172.0	8.3	0.02
53.0	72.0	1.68	113.0	15.0	0.07	173.0	8.3	0.02
54.0	71.0	1.63	114.0	14.4	0.07	174.0	8.3	0.02
55.0	70.0	1.59	115.0	13.9	0.06	175.0	8.3	0.02
56.0	69.0	1.54	116.0	13.5	0.06	176.0	8.3	0.02
57.0	68.0	1.50	117.0	13.1	0.06	177.0	8.3	0.02
58.0	67.0	1.45	118.0	12.7	0.05	178.0	8.4	0.02
59.0	66.0	1.41	119.0	12.3	0.05	179.0	8.4	0.02

TX station: BLK5 SINGLE BAY VERTICAL

Site name:

Frequency: 100.00 MHz

**Horizontal diagram at 0.0° depres. (Total antenna)**

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
180.0	8.4	0.02	240.0	11.9	0.05	300.0	65.0	1.37
181.0	8.4	0.02	241.0	12.3	0.05	301.0	66.0	1.41
182.0	8.4	0.02	242.0	12.7	0.05	302.0	67.0	1.45
183.0	8.3	0.02	243.0	13.1	0.06	303.0	68.0	1.50
184.0	8.3	0.02	244.0	13.5	0.06	304.0	69.0	1.54
185.0	8.3	0.02	245.0	13.9	0.06	305.0	70.0	1.59
186.0	8.3	0.02	246.0	14.4	0.07	306.0	71.0	1.63
187.0	8.3	0.02	247.0	15.0	0.07	307.0	72.0	1.68
188.0	8.3	0.02	248.0	15.6	0.08	308.0	73.0	1.72
189.0	8.2	0.02	249.0	16.2	0.09	309.0	74.0	1.77
190.0	8.2	0.02	250.0	16.8	0.09	310.0	75.0	1.82
191.0	8.2	0.02	251.0	17.4	0.10	311.0	76.2	1.88
192.0	8.1	0.02	252.0	18.0	0.11	312.0	77.4	1.94
193.0	8.1	0.02	253.0	18.6	0.11	313.0	78.6	2.00
194.0	8.1	0.02	254.0	19.2	0.12	314.0	79.8	2.06
195.0	8.0	0.02	255.0	19.8	0.13	315.0	81.0	2.12
196.0	7.9	0.02	256.0	20.6	0.14	316.0	81.6	2.15
197.0	7.8	0.02	257.0	21.4	0.15	317.0	82.2	2.19
198.0	7.7	0.02	258.0	22.3	0.16	318.0	82.8	2.22
199.0	7.7	0.02	259.0	23.1	0.17	319.0	83.4	2.25
200.0	7.6	0.02	260.0	23.9	0.18	320.0	84.0	2.28
201.0	7.5	0.02	261.0	24.7	0.20	321.0	84.7	2.32
202.0	7.4	0.02	262.0	25.5	0.21	322.0	85.4	2.36
203.0	7.3	0.02	263.0	26.3	0.22	323.0	86.1	2.40
204.0	7.2	0.02	264.0	27.1	0.24	324.0	86.8	2.44
205.0	7.1	0.02	265.0	28.0	0.25	325.0	87.5	2.48
206.0	7.1	0.02	266.0	28.8	0.27	326.0	88.2	2.52
207.0	7.1	0.02	267.0	29.6	0.28	327.0	88.9	2.56
208.0	7.1	0.02	268.0	30.4	0.30	328.0	89.6	2.60
209.0	7.1	0.02	269.0	31.2	0.31	329.0	90.3	2.64
210.0	7.1	0.02	270.0	32.0	0.33	330.0	91.0	2.68
211.0	7.1	0.02	271.0	33.0	0.35	331.0	91.4	2.70
212.0	7.1	0.02	272.0	34.0	0.37	332.0	91.8	2.73
213.0	7.1	0.02	273.0	35.0	0.40	333.0	92.2	2.75
214.0	7.1	0.02	274.0	36.0	0.42	334.0	92.6	2.77
215.0	7.1	0.02	275.0	37.0	0.44	335.0	93.0	2.80
216.0	7.2	0.02	276.0	37.8	0.46	336.0	93.5	2.83
217.0	7.3	0.02	277.0	38.6	0.48	337.0	94.0	2.86
218.0	7.3	0.02	278.0	39.4	0.50	338.0	94.5	2.89
219.0	7.4	0.02	279.0	40.2	0.52	339.0	95.0	2.92
220.0	7.5	0.02	280.0	41.0	0.54	340.0	95.5	2.95
221.0	7.6	0.02	281.0	42.2	0.58	341.0	95.9	2.98
222.0	7.7	0.02	282.0	43.4	0.61	342.0	96.3	3.00
223.0	7.8	0.02	283.0	44.6	0.64	343.0	96.7	3.03
224.0	7.9	0.02	284.0	45.8	0.68	344.0	97.1	3.05
225.0	8.0	0.02	285.0	47.0	0.71	345.0	97.5	3.08
226.0	8.2	0.02	286.0	48.1	0.75	346.0	97.7	3.09
227.0	8.4	0.02	287.0	49.2	0.78	347.0	97.9	3.10
228.0	8.6	0.02	288.0	50.3	0.82	348.0	98.1	3.11
229.0	8.8	0.02	289.0	51.4	0.85	349.0	98.3	3.13
230.0	9.0	0.03	290.0	52.5	0.89	350.0	98.5	3.14
231.0	9.2	0.03	291.0	54.0	0.94	351.0	98.7	3.15
232.0	9.4	0.03	292.0	55.5	1.00	352.0	99.0	3.17
233.0	9.6	0.03	293.0	57.0	1.05	353.0	99.2	3.19
234.0	9.8	0.03	294.0	58.5	1.11	354.0	99.5	3.20
235.0	9.9	0.03	295.0	60.0	1.16	355.0	99.7	3.22
236.0	10.3	0.03	296.0	61.0	1.20	356.0	99.8	3.22
237.0	10.7	0.04	297.0	62.0	1.24	357.0	99.8	3.22
238.0	11.1	0.04	298.0	63.0	1.28	358.0	99.9	3.23
239.0	11.5	0.04	299.0	64.0	1.33	359.0	99.9	3.23



## E-4 K285FW Mod. HAAT Calculation

### Antenna Height Above Average Terrain Calculations -- Results

#### Input Data

Latitude **35° 57' 4.25"** North

Longitude **121° 0' 6.25"** West (NAD 83)

Height of antenna radiation center above mean sea level: **870.3** meters AMSL

Number of Evenly Spaced Radials = **12**      0° is referenced to True North

#### Results

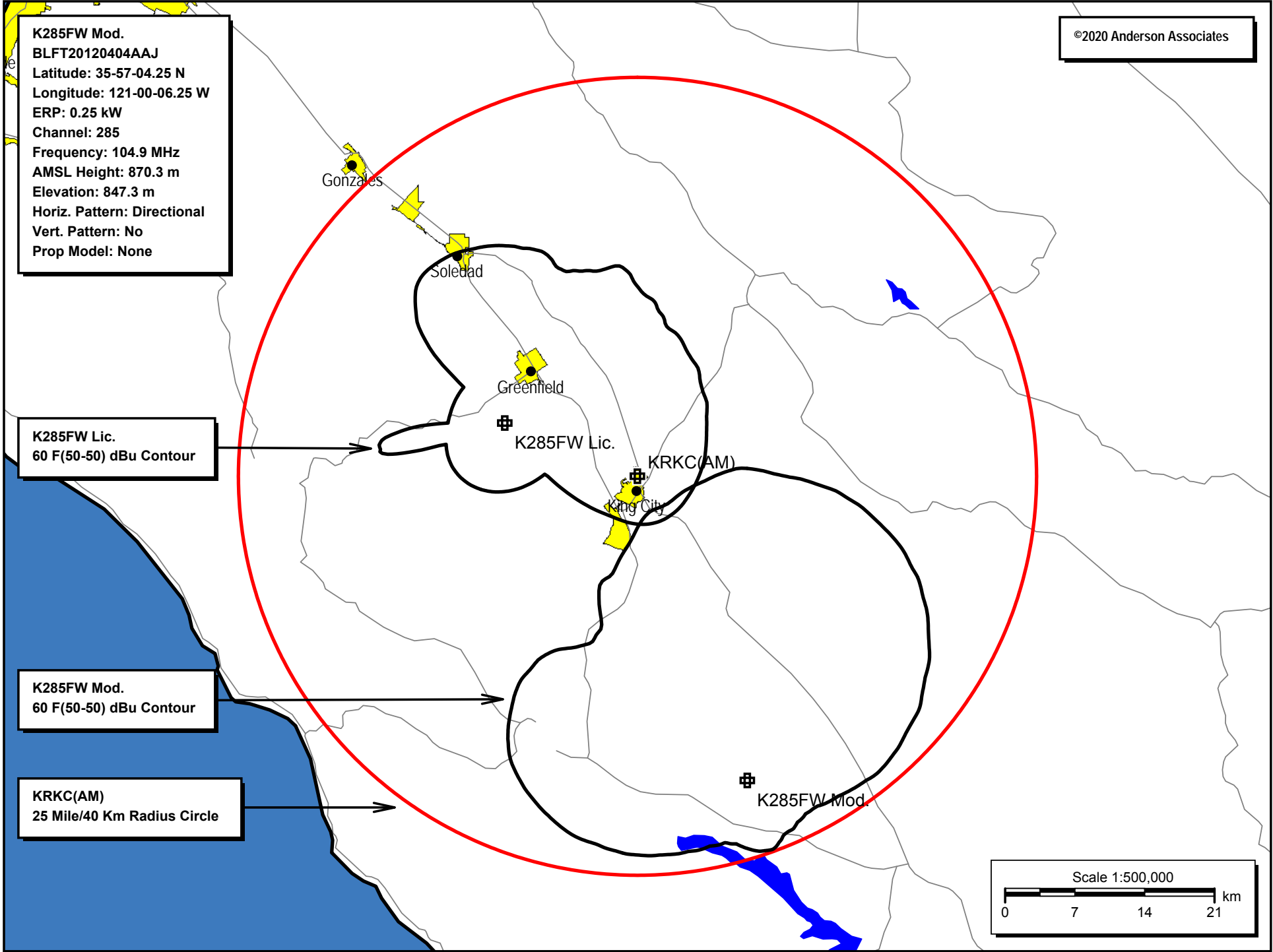
Calculated HAAT = **530 meters**

Antenna Height Above Average Terrain calculated  
using 1 km [GLOBE terrain data](#)

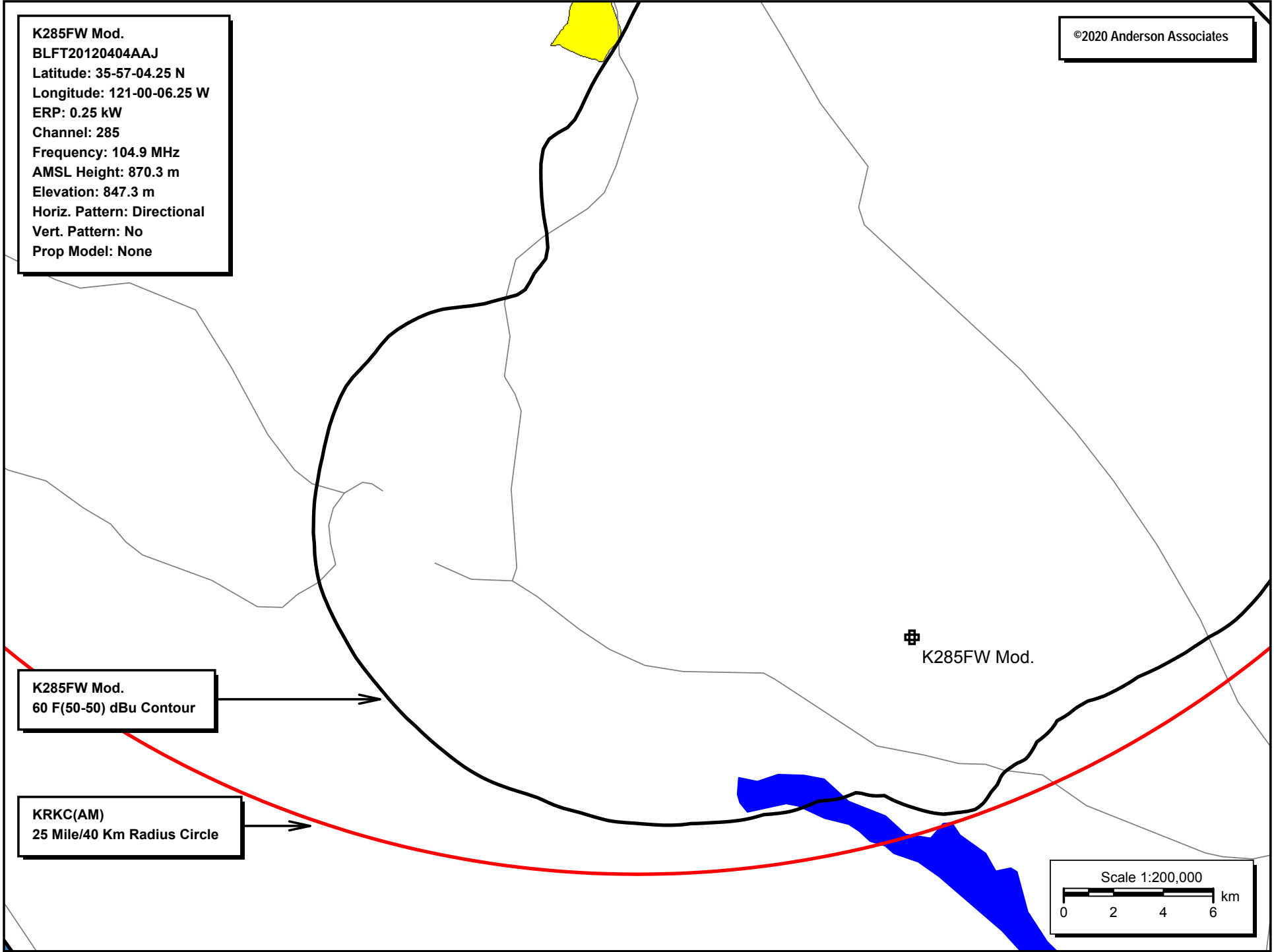
#### Individual "Radial HAAT" Values, in meters

0°	586.5 m
30°	622.1 m
60°	581.6 m
90°	561.8 m
120°	540.1 m
150°	464.6 m
180°	556.8 m
210°	523.0 m
240°	545.1 m
270°	560.7 m
300°	417.9 m
330°	394.4 m

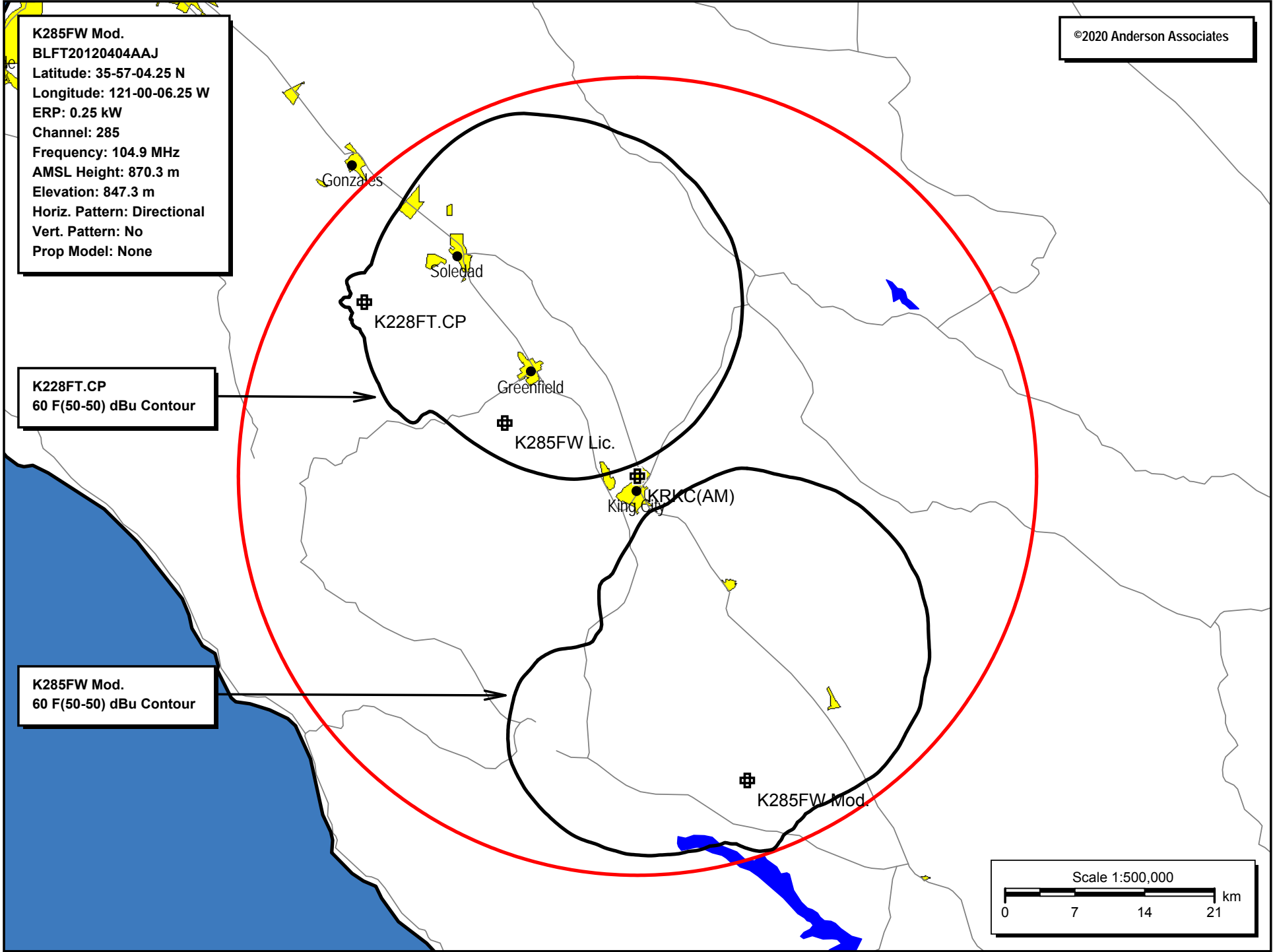
E-5 K285FW Mod. 60 F(50-50) dBu Contour Plot



E-5A K285FW Mod. 60 F(50-50) dBu Contour Plot



E-5B K285FW Mod. 60 F(50-50) dBu Contour Plot

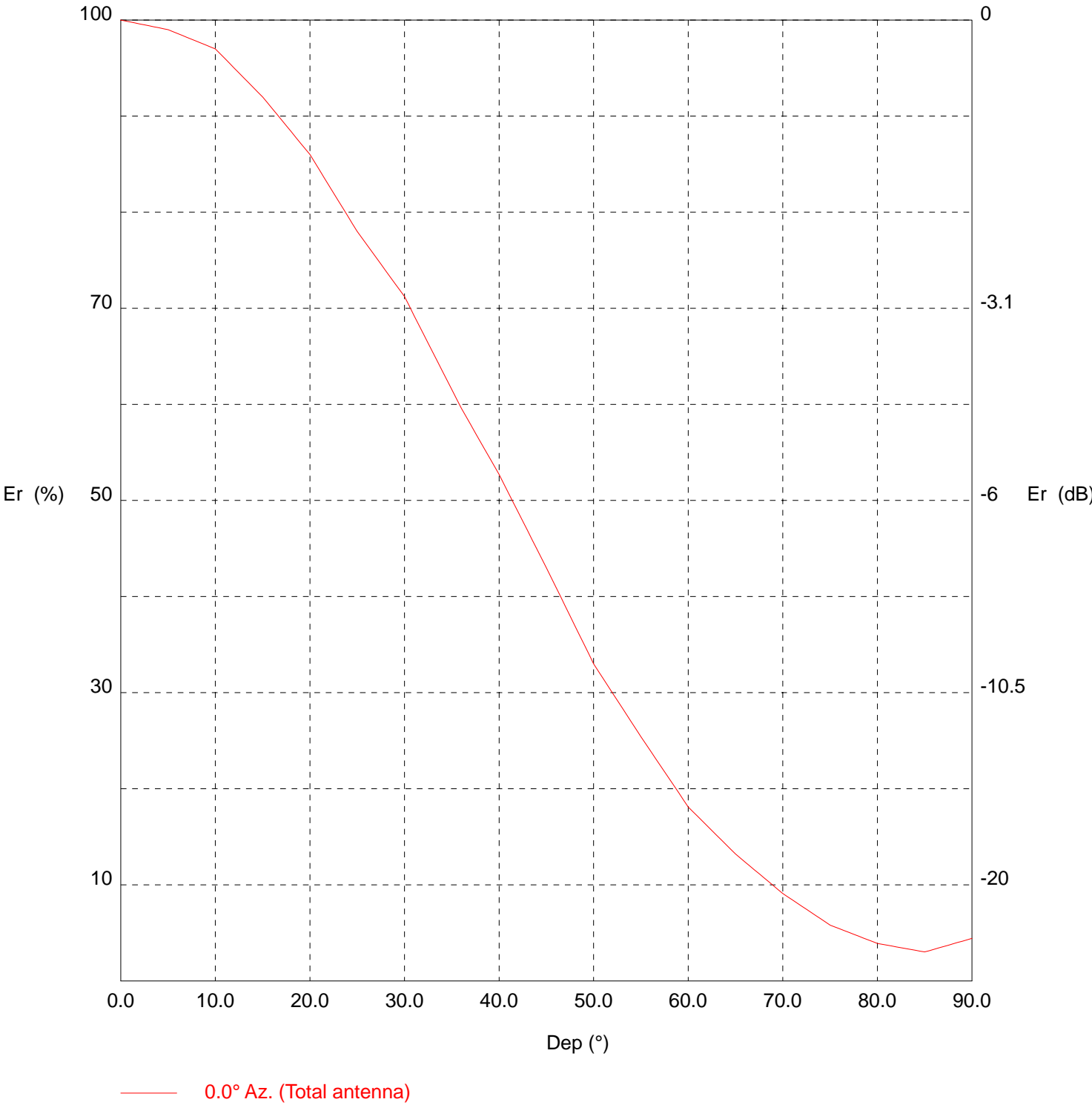


E-6 Nicom BLK5-1 Vertical Elevation Pattern and Tabulation

TX station: BLK5 SINGLE BAY VERTICAL

Frequency: 100.00 MHz

Vertical diagram



TX station: BLK5 SINGLE BAY VERTICAL

Site name:

Frequency: 100.00 MHz

## Vertical diagram at an azimuth of 0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
0.0	100.0	3.24	30.0	71.2	1.64	60.0	18.1	0.11
0.5	99.9	3.23	30.5	70.3	1.60	60.5	17.6	0.10
1.0	99.8	3.22	31.0	69.3	1.55	61.0	17.1	0.09
1.5	99.7	3.22	31.5	68.3	1.51	61.5	16.6	0.09
2.0	99.6	3.21	32.0	67.3	1.47	62.0	16.1	0.08
2.5	99.5	3.20	32.5	66.4	1.43	62.5	15.7	0.08
3.0	99.4	3.20	33.0	65.4	1.38	63.0	15.2	0.07
3.5	99.3	3.19	33.5	64.4	1.34	63.5	14.7	0.07
4.0	99.2	3.18	34.0	63.5	1.30	64.0	14.2	0.07
4.5	99.1	3.18	34.5	62.5	1.26	64.5	13.7	0.06
5.0	99.0	3.17	35.0	61.5	1.23	65.0	13.2	0.06
5.5	98.8	3.16	35.5	60.6	1.19	65.5	12.8	0.05
6.0	98.6	3.15	36.0	59.6	1.15	66.0	12.4	0.05
6.5	98.4	3.13	36.5	58.7	1.12	66.5	12.0	0.05
7.0	98.2	3.12	37.0	57.9	1.08	67.0	11.6	0.04
7.5	98.0	3.11	37.5	57.0	1.05	67.5	11.2	0.04
8.0	97.8	3.10	38.0	56.2	1.02	68.0	10.7	0.04
8.5	97.6	3.08	38.5	55.3	0.99	68.5	10.3	0.03
9.0	97.4	3.07	39.0	54.4	0.96	69.0	9.9	0.03
9.5	97.2	3.06	39.5	53.6	0.93	69.5	9.5	0.03
10.0	97.0	3.04	40.0	52.7	0.90	70.0	9.1	0.03
10.5	96.5	3.01	40.5	51.7	0.87	70.5	8.8	0.02
11.0	96.0	2.98	41.0	50.8	0.83	71.0	8.4	0.02
11.5	95.5	2.95	41.5	49.8	0.80	71.5	8.1	0.02
12.0	95.0	2.92	42.0	48.8	0.77	72.0	7.8	0.02
12.5	94.5	2.89	42.5	47.9	0.74	72.5	7.4	0.02
13.0	94.0	2.86	43.0	46.9	0.71	73.0	7.1	0.02
13.5	93.5	2.83	43.5	45.9	0.68	73.5	6.8	0.01
14.0	93.0	2.80	44.0	44.9	0.65	74.0	6.5	0.01
14.5	92.5	2.77	44.5	44.0	0.63	74.5	6.1	0.01
15.0	92.0	2.74	45.0	43.0	0.60	75.0	5.8	0.01
15.5	91.4	2.70	45.5	42.0	0.57	75.5	5.6	0.01
16.0	90.8	2.67	46.0	41.0	0.54	76.0	5.4	0.01
16.5	90.2	2.63	46.5	40.0	0.52	76.5	5.2	0.01
17.0	89.6	2.60	47.0	39.0	0.49	77.0	5.0	0.01
17.5	89.0	2.56	47.5	38.0	0.47	77.5	4.9	0.01
18.0	88.4	2.53	48.0	37.0	0.44	78.0	4.7	0.01
18.5	87.8	2.49	48.5	36.0	0.42	78.5	4.5	0.01
19.0	87.2	2.46	49.0	35.0	0.40	79.0	4.3	0.01
19.5	86.6	2.43	49.5	34.0	0.37	79.5	4.1	0.01
20.0	86.0	2.39	50.0	33.0	0.35	80.0	3.9	0.00
20.5	85.2	2.35	50.5	32.2	0.34	80.5	3.8	0.00
21.0	84.4	2.31	51.0	31.5	0.32	81.0	3.7	0.00
21.5	83.6	2.26	51.5	30.7	0.31	81.5	3.6	0.00
22.0	82.8	2.22	52.0	30.0	0.29	82.0	3.5	0.00
22.5	82.0	2.18	52.5	29.2	0.28	82.5	3.5	0.00
23.0	81.2	2.13	53.0	28.4	0.26	83.0	3.4	0.00
23.5	80.4	2.09	53.5	27.7	0.25	83.5	3.3	0.00
24.0	79.6	2.05	54.0	26.9	0.23	84.0	3.2	0.00
24.5	78.8	2.01	54.5	26.2	0.22	84.5	3.1	0.00
25.0	78.0	1.97	55.0	25.4	0.21	85.0	3.0	0.00
25.5	77.3	1.93	55.5	24.7	0.20	85.5	3.2	0.00
26.0	76.6	1.90	56.0	23.9	0.19	86.0	3.3	0.00
26.5	76.0	1.87	56.5	23.2	0.17	86.5	3.4	0.00
27.0	75.3	1.83	57.0	22.5	0.16	87.0	3.6	0.00
27.5	74.6	1.80	57.5	21.8	0.15	87.5	3.7	0.00
28.0	73.9	1.77	58.0	21.0	0.14	88.0	3.9	0.00
28.5	73.3	1.74	58.5	20.3	0.13	88.5	4.0	0.01
29.0	72.6	1.70	59.0	19.6	0.12	89.0	4.1	0.01
29.5	71.9	1.67	59.5	18.8	0.11	89.5	4.3	0.01