

Doug Verner Telecommunications Consultants  
1600 Picturesque Drive, Cedar Falls, IA 50613

Minor Change to KPSC

REFERENCE											CH#	203A	- 88.5 MHz, Pwr= 1.26 kW, HAAT=194.0 M, COR= 511 M	DISPLAY		DATES		
33 52 03 N 116 25 59 W											Ave. F(50-10)	40	Average Protected F(50-50)= 26.68 km	COR(M)	PRO(km)	LICENSEE	DATA	09-10-02
CH	CALL	TYPE	STATE	AZI.	DI ST	LAT.	LNG.	Pwr (kW)	HAAT(M)	INT(km)	*IN*	*OUT*		SEARCH	09-10-02			
				<-	FILE #								(Overlap in km)					
203A	KPSC Pal m Springs	LIC	CN CA	88.9 268.9	19.02 BLED19891212KE	33 52 14 116 13 39	3.000 81	803 72.1	21.9 Uni versity Of Southern Cal		-79.80<	-80.69<						
201B	*990310 Yucca Val ley > Reference HAAT at 7.3°= -147.6 M,	APP	CN CA	7.3 187.3	31.94 BPED19990310MO	34 09 11 116 23 20	50.000 -52	1179 2.7	26.5 Sacramento Brain Trust Inc		18.51	3.82						
203B1	*KSBR. A Mi ssion Vi ej o > Reference HAAT at 249.8°= 160.6 M,	APP	DCN CA	249.8 69.8	115.67 BPED19990813IB	33 30 10 117 36 06	1.403 -22	395 40.0	11.0 Saddl eback Communi ty Col le		51.11	31.25						
201B1	*990310 Yucca Val ley > Reference HAAT at 357.2°= 22.7 M,	APP	CN CA	357.2 177.2	28.07 BPED19990310MB	34 07 13 116 26 53	7.000 67	1023 2.4	24.3 Broadcasting For The Chall		14.89	2.17						
201B1	*981013 Yucca Val ley > Reference HAAT at 349.0°= -17.4 M,	APP	DCN CA	349.0 169.0	28.13 BPED19981013MB	34 06 59 116 29 29	0.405 275	1291 1.4	24.2 Penfold Communi cati ons, In		15.97	2.29						
204A	*AP204 Big Bear Ci ty > Reference HAAT at 317.4°= 227.6 M,	APP	CX CA	317.4 137.4	58.13 BNPED20000215ABM	34 15 06 116 51 41	0.100 -298	2148 8.0	5.6 Community Public Radio, In		21.31	8.85						
203A	*KHMS Vi ctori villa > Reference HAAT at 316.7°= 227.6 M,	LIC	CN CA	316.7 136.7	114.11 BLED19961016KA	34 36 40 117 17 20	0.200 445	1374 78.5	25.8 Faith Communi cati ons Corp.		6.74	6.51						
203A	KSBR Mi ssion Vi ej o	LIC	CN CA	249.8 69.8	115.67 BLED19790426AB	33 30 10 117 36 06	0.600 183	358 66.7	22.0 Saddl eback Communi ty Col le		22.29	15.82						
205B	KRTM. A Temecula	APP	DEX CA	220.1 40.1	72.25 BPED19980708MA	33 22 09 116 56 04	0.270 932	1757 1.2	41.9 Penfold Communi cati ons, In		44.42	28.31						
205B	KRTM. A Temecula	APP	DCN CA	220.1 40.1	72.25 BPED19980708MA	33 22 09 116 56 04	0.270 932	1757 1.2	41.9 Penfold Communi cati ons, In		44.42	28.31						
202A	KUCR Ri verside	LIC	CN CA	278.2 98.2	79.74 BLED19980113KD	33 57 58 117 17 14	0.150 494	939 39.4	25.4 The Regents Of The Uni v. O		13.64	14.12						
206A	KUORFM Redlands	LIC	CN CA	303.0 123.0	67.57 BLED19890501KA	34 11 47 117 02 56	0.035 848	2419 0.4	23.5 Uni versity Of Redlands		40.48	42.02						
202B1	KSDS. A San Di ego	APP	DCN CA	210.3 30.3	136.29 BPED19940802MA	32 48 19 117 10 09	22.000 75	159 53.3	33.3 San Di ego Communi ty Col leg		56.32	62.76						
202B1	KSDS. A San Di ego	APP	DC CA	210.3 30.3	136.29 BPED19961125ME	32 48 19 117 10 09	19.000 75	159 51.4	32.2 San Di ego Communi ty Col leg		58.16	63.92						
205A	KRTM Temecula	LIC	CN CA	236.0 56.0	79.34 BLED19901025KA	33 27 59 117 08 29	1.150 138	514 1.8	22.5 Penfold Communi cati ons, In		50.83	54.80						
204A	KSPC Cl aremont	LIC	CN CA	282.4 102.4	120.62 BLED1190	34 05 38 117 42 35	3.000 -81	395 19.5	13.2 Pomona College Radio Stati		74.42	67.22						
06-2C	KMOHTV Ki ngman	CP	DHN AZ	55.1 235.1	229.78 BPCT19990708KF	35 01 57 114 21 56	100.000 592	1377 0.0	127.6 Multi medi a Holdings Corpor		To Grd B= 102.19							

"\*" = ERP and HAAT on direct line to and from reference station. "<" = Contour Overlap

## HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "**\* IN \***" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "**\* OUT \***" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing overlap interference.

Under the "AZIMUTH" column, the first row of numbers indicate the bearings from True North of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station.

The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

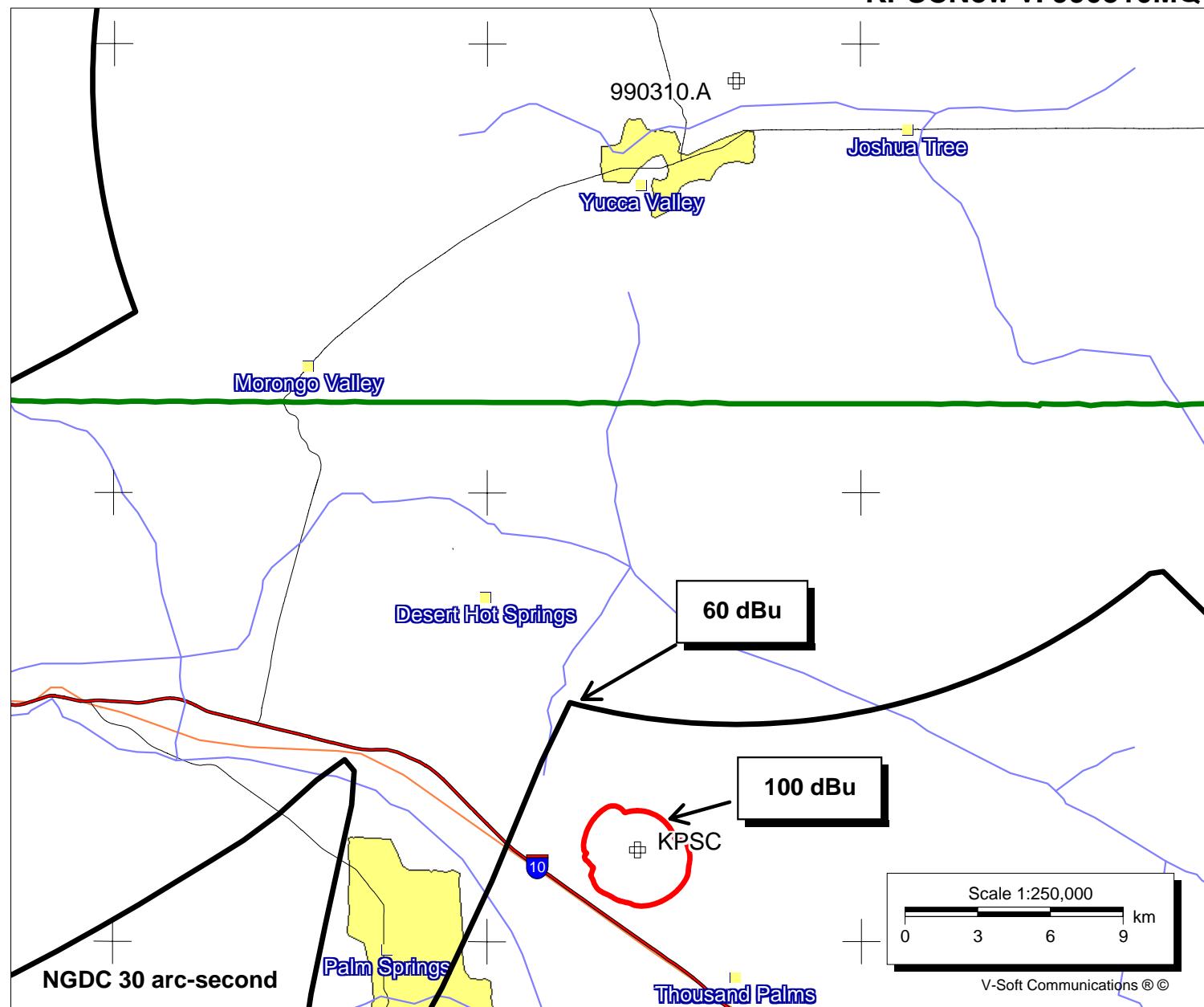
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates omni. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N".

# KPSCNew v. 990310MQ

**KPSC**  
 Latitude: 33-52-03 N  
 Longitude: 116-25-59 W  
 ERP: 1.26 kW  
 Channel: 203  
 Frequency: 88.5 MHz  
 AMSL Height: 510.7 m  
 Elevation: 447.9m  
 HAAT: 194.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**990310.A**  
 BPED1990310MQ  
 Latitude: 34-09-11 N  
 Longitude: 116-23-20 W  
 ERP: 50.00 kW  
 Channel: 201  
 Frequency: 88.1 MHz  
 AMSL Height: 1179.0 m  
 Elevation: 1064.13 m  
 HAAT: 116.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

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09-10-2002 30 Sec. Terrain Data

990310 BPED19990310MQ  
 Channel = 201B  
 Max ERP = 50 kW  
 RCAMSL = 1179 M  
 N. Lat = 34 09 11  
 W. Lng = 116 23 20

KPSC  
 Channel = 203A  
 Max ERP = 1.26 kW  
 RCAMSL = 510.7 M  
 N. Lat = 335203  
 W. Lng = 1162559

Protected  
60 dBu

Interfering  
100 dBu

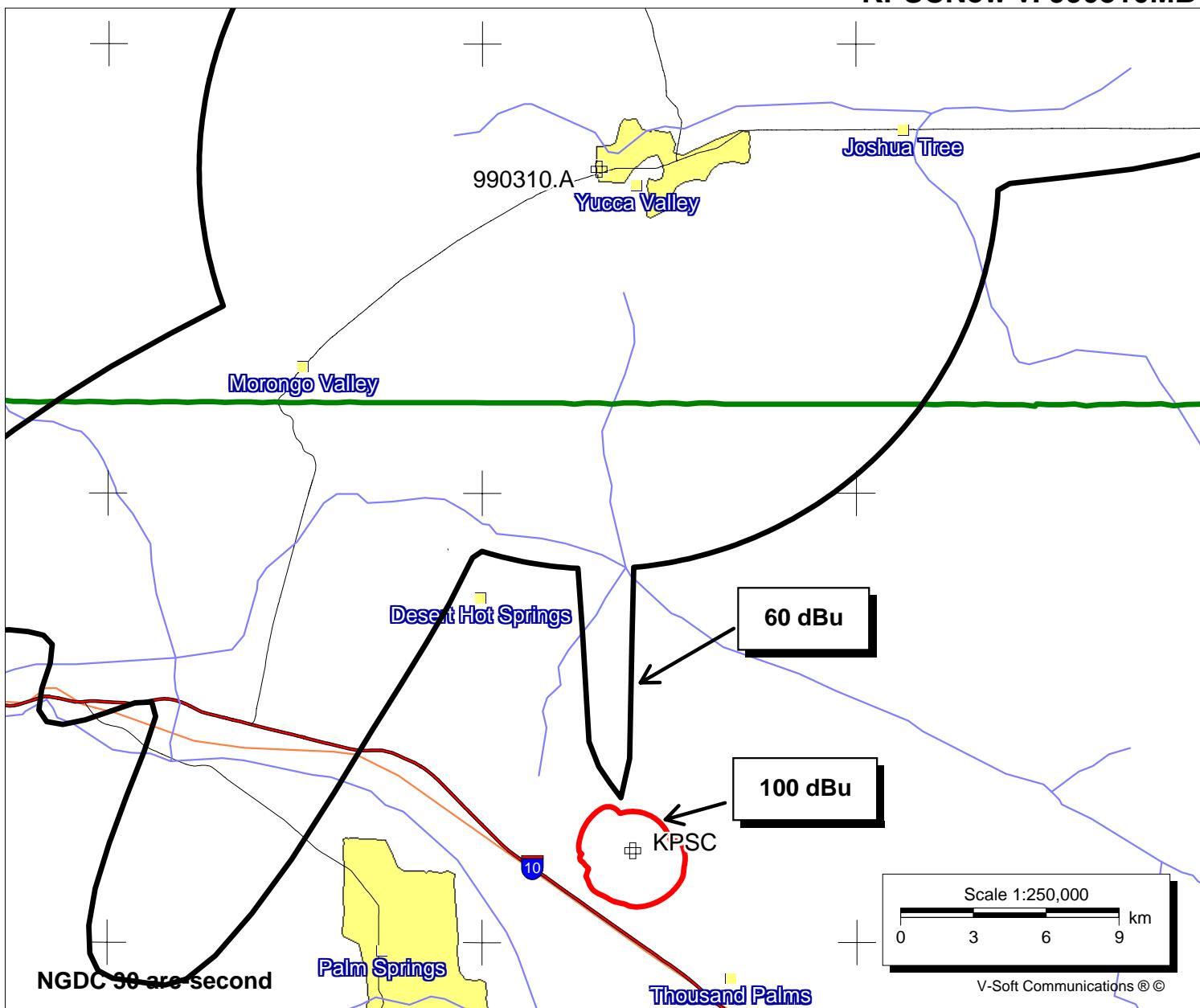
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
170.0	050.0000	-0082.9	026.5	057.2	001.2600	-0027.6	010.3	60.7
171.0	050.0000	-0084.2	026.5	056.2	001.2600	-0030.5	009.9	61.5
172.0	050.0000	-0083.7	026.5	055.0	001.2600	-0039.5	009.5	62.2
173.0	050.0000	-0080.2	026.5	053.6	001.2600	-0053.9	009.1	63.0
174.0	050.0000	-0074.3	026.5	052.1	001.2600	-0088.0	008.7	63.7
175.0	050.0000	-0070.9	026.5	050.4	001.2600	-0124.4	008.3	64.4
176.0	050.0000	-0068.8	026.5	048.5	001.2600	-0153.6	007.9	65.2
177.0	050.0000	-0066.2	026.5	046.3	001.2600	-0179.2	007.5	65.9
178.0	050.0000	-0064.1	026.5	043.9	001.2600	-0199.3	007.2	66.7
179.0	050.0000	-0054.6	026.5	041.2	001.2600	-0220.7	006.9	67.5
180.0	050.0000	-0045.2	026.5	038.2	001.2600	-0201.5	006.6	68.3
181.0	050.0000	-0036.1	026.5	034.9	001.2600	-0174.6	006.3	69.0
182.0	050.0000	-0033.6	026.5	031.3	001.2600	-0144.7	006.1	69.7
183.0	050.0000	-0033.1	026.5	027.3	001.2600	-0135.3	005.9	70.3
184.0	050.0000	-0032.7	026.5	023.1	001.2600	-0121.8	005.7	70.8
185.0	050.0000	-0037.5	026.5	018.5	001.2600	-0135.7	005.6	71.2
186.0	050.0000	-0047.4	026.5	013.8	001.2600	-0160.9	005.5	71.5
187.0	050.0000	-0052.1	026.5	009.0	001.2600	-0166.2	005.4	71.6
188.0	050.0000	-0054.1	026.5	004.2	001.2600	-0113.7	005.4	71.6
189.0	050.0000	-0052.4	026.5	359.4	001.2600	-0024.0	005.5	71.5
190.0	050.0000	-0046.8	026.5	354.7	001.2600	0026.8	005.6	71.1
191.0	050.0000	-0037.0	026.5	350.3	001.2600	-0017.9	005.7	70.7
192.0	050.0000	-0023.8	026.5	346.1	001.2600	0007.9	005.9	70.1
193.0	050.0000	-0007.7	026.5	342.3	001.2600	0065.5	006.1	76.3
194.0	050.0000	0010.3	026.5	338.7	001.2600	0106.5	006.4	80.0
195.0	050.0000	0024.7	026.5	335.5	001.2600	0144.2	006.7	81.7
196.0	050.0000	0037.8	029.2	312.4	001.2600	0233.4	005.4	88.8
197.0	050.0000	0052.8	034.5	257.8	001.2600	0213.1	006.1	86.2
198.0	050.0000	0072.1	039.3	234.7	001.2600	0288.3	009.8	81.1
199.0	050.0000	0091.0	043.1	227.5	001.2600	0361.2	013.5	77.6
200.0	050.0000	0106.5	045.9	225.3	001.2600	0364.3	016.3	74.6
201.0	050.0000	0116.1	047.4	225.6	001.2600	0363.6	018.0	73.2
202.0	050.0000	0116.3	047.4	227.9	001.2600	0356.4	018.4	72.7
203.0	050.0000	0108.5	046.2	232.1	001.2600	0329.8	017.7	72.6
204.0	050.0000	0096.5	044.1	238.0	001.2600	0254.8	016.3	71.7

# KPSCNew v. 990310MB

**KPSC**  
Latitude: 33-52-03 N  
Longitude: 116-25-59 W  
ERP: 1.26 kW  
Channel: 203  
Frequency: 88.5 MHz  
AMSL Height: 510.7 m  
Elevation: 447.9 m  
HAAT: 194.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

**990310.A**  
BPED19990310MB  
Latitude: 34-07-13 N  
Longitude: 116-26-53 W  
ERP: 7.00 kW  
Channel: 201  
Frequency: 88.1 MHz  
AMSL Height: 1023.0 m  
Elevation: 1036.0 m  
HAAT: -107.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

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 09-10-2002 30 Sec. Terrain Data

990310 BPED19990310MB  
 Channel = 201B1  
 Max ERP = 7 kW  
 RCAMSL = 1023 M  
 N. Lat = 34 07 13  
 W. Lng = 116 26 53

KPSC  
 Channel = 203A  
 Max ERP = 1.26 kW  
 RCAMSL = 510.7 M  
 N. Lat = 335203  
 W. Lng = 1162559

Protected  
 60 dBu

Interfering  
 100 dBu

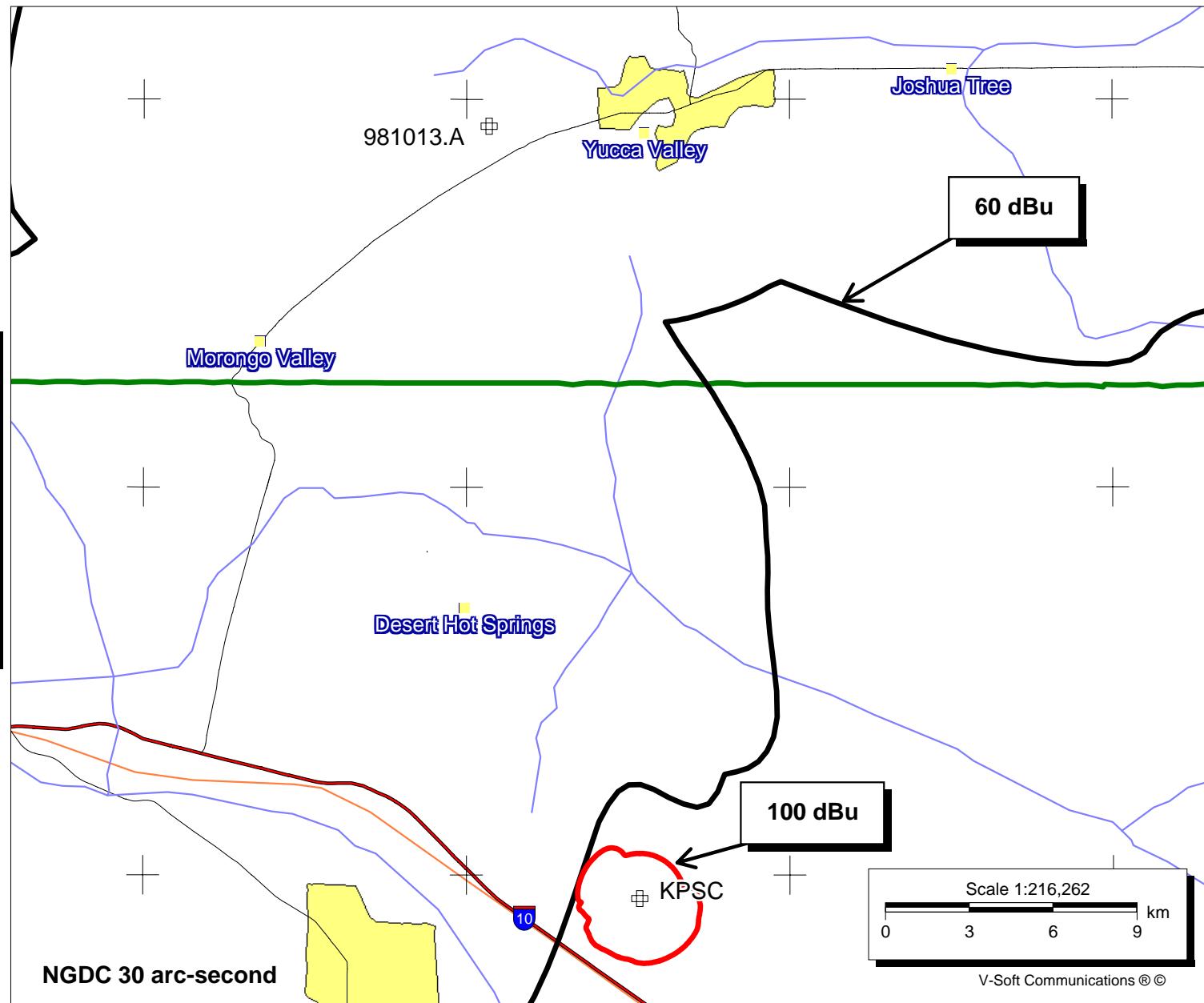
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
160.0	007.0000	-0177.8	016.4	018.5	001.2600	-0135.7	013.3	56.2
161.0	007.0000	-0185.7	016.4	017.5	001.2600	-0141.9	013.1	56.4
162.0	007.0000	-0193.8	016.4	016.5	001.2600	-0145.7	012.9	56.6
163.0	007.0000	-0197.3	016.4	015.5	001.2600	-0151.3	012.8	56.9
164.0	007.0000	-0192.6	016.4	014.4	001.2600	-0160.9	012.6	57.1
165.0	007.0000	-0179.7	016.4	013.2	001.2600	-0173.5	012.5	57.3
166.0	007.0000	-0161.6	016.4	012.0	001.2600	-0179.9	012.4	57.5
167.0	007.0000	-0143.0	016.4	010.8	001.2600	-0179.3	012.2	57.6
168.0	007.0000	-0124.2	016.4	009.6	001.2600	-0172.6	012.1	57.8
169.0	007.0000	-0105.8	016.4	008.3	001.2600	-0158.1	012.0	58.0
170.0	007.0000	-0087.1	016.4	007.0	001.2600	-0147.9	011.9	58.1
171.0	007.0000	-0067.1	016.4	005.7	001.2600	-0138.8	011.9	58.2
172.0	007.0000	-0048.6	016.4	004.4	001.2600	-0113.7	011.8	58.3
173.0	007.0000	-0028.0	016.4	003.0	001.2600	-0098.0	011.7	58.4
174.0	007.0000	-0008.4	016.4	001.6	001.2600	-0081.3	011.7	58.5
175.0	007.0000	0013.2	016.4	000.2	001.2600	-0046.7	011.7	58.5
176.0	007.0000	0041.9	019.5	359.8	001.2600	-0046.7	008.6	63.8
177.0	007.0000	0066.5	024.3	358.2	001.2600	-0000.7	003.8	77.8
178.0	007.0000	0076.8	025.9	347.5	001.2600	-0005.0	002.2	87.4
179.0	007.0000	0072.7	025.2	341.4	001.2600	0079.6	003.0	90.3
180.0	007.0000	0068.4	024.6	338.2	001.2600	0119.8	003.7	89.7
181.0	007.0000	0061.8	023.6	338.3	001.2600	0119.8	004.8	85.7
182.0	007.0000	0040.3	019.1	347.1	001.2600	-0005.0	009.2	62.7
183.0	007.0000	0020.4	016.4	349.1	001.2600	-0017.7	011.8	58.3
184.0	007.0000	0003.0	016.4	347.8	001.2600	-0013.1	011.9	58.1
185.0	007.0000	-0004.4	016.4	346.5	001.2600	0007.9	012.0	58.0
186.0	007.0000	-0010.2	016.4	345.2	001.2600	0023.0	012.1	57.9
187.0	007.0000	-0014.3	016.4	343.9	001.2600	0037.2	012.2	59.4
188.0	007.0000	-0015.0	016.4	342.7	001.2600	0051.3	012.3	62.2
189.0	007.0000	-0015.0	016.4	341.5	001.2600	0065.5	012.4	64.0
190.0	007.0000	-0013.6	016.4	340.4	001.2600	0093.1	012.6	66.8
191.0	007.0000	-0013.0	016.4	339.3	001.2600	0106.5	012.7	67.8
192.0	007.0000	-0009.9	016.4	338.2	001.2600	0119.8	012.9	68.5
193.0	007.0000	-0005.9	016.4	337.2	001.2600	0132.8	013.0	69.2
194.0	007.0000	-0000.8	016.4	336.2	001.2600	0144.2	013.2	69.7

# KPSCNew v. 981013.A

**KPSC**  
Latitude: 33-52-03 N  
Longitude: 116-25-59 W  
ERP: 1.26 kW  
Channel: 203  
Frequency: 88.5 MHz  
AMSL Height: 510.7 m  
Elevation: 447.9m  
HAAT: 194.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

**981013.A**  
BPED19981013MB  
Latitude: 34-06-59 N  
Longitude: 116-29-29 W  
ERP: 8.40 kW  
Channel: 201  
Frequency: 88.1 MHz  
AMSL Height: 1291.0 m  
Elevation: 1234.3 m  
HAAT: 114.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: FCC

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 09-10-2002 30 Sec. Terrain Data

981013 BPED19981013MB  
 Channel = 201B1  
 Max ERP = 8.4 kW  
 RCAMSL = 1291 M  
 N. Lat = 34 06 59  
 W. Lng = 116 29 29

KPSC  
 Channel = 203A  
 Max ERP = 1.26 kW  
 RCAMSL = 510.7 M  
 N. Lat = 335203  
 W. Lng = 1162559

Protected  
 60 dBu

Interfering  
 100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
165.0	000.3394	0315.4	024.8	016.0	001.2600	-0147.9	003.8	77.9
166.0	000.3551	0298.3	024.4	007.5	001.2600	-0147.9	003.9	77.1
167.0	000.3711	0285.0	024.2	000.5	001.2600	-0064.1	004.1	76.5
168.0	000.3876	0276.8	024.1	354.5	001.2600	0026.8	004.1	76.4
169.0	000.4043	0274.8	024.2	348.6	001.2600	-0017.7	003.9	77.2
170.0	000.4215	0278.4	024.6	341.6	001.2600	0065.5	003.6	85.8
171.0	000.4436	0285.0	025.2	332.0	001.2600	0177.5	003.1	94.8
172.0	000.4663	0298.7	026.1	315.7	001.2600	0228.6	002.5	98.3
173.0	000.4895	0314.1	027.0	291.0	001.2600	0285.8	002.3	99.8
174.0	000.5133	0330.7	028.0	263.9	001.2600	0222.2	002.5	98.4
175.0	000.5377	0347.9	029.1	244.2	001.2600	0191.5	003.2	94.8
176.0	000.5626	0365.2	030.2	232.9	001.2600	0318.4	004.1	93.4
177.0	000.5881	0382.2	031.2	226.9	001.2600	0361.2	005.1	91.3
178.0	000.6142	0397.0	032.0	224.0	001.2600	0363.7	006.1	89.1
179.0	000.6408	0411.6	032.9	222.1	001.2600	0356.2	007.2	87.1
180.0	000.6680	0426.0	033.8	220.8	001.2600	0348.6	008.2	85.2
181.0	000.6675	0447.4	034.7	220.2	001.2600	0340.6	009.3	83.4
182.0	000.6671	0470.2	035.6	219.7	001.2600	0340.6	010.4	81.6
183.0	000.6666	0492.9	036.5	219.3	001.2600	0334.1	011.5	79.7
184.0	000.6661	0512.4	037.4	219.5	001.2600	0334.1	012.6	78.1
185.0	000.6656	0530.9	038.2	219.8	001.2600	0340.6	013.6	76.9
186.0	000.6652	0545.1	038.8	220.6	001.2600	0348.6	014.5	76.0
187.0	000.6647	0558.7	039.3	221.6	001.2600	0356.2	015.3	75.2
188.0	000.6642	0574.0	039.9	222.5	001.2600	0356.2	016.2	74.5
189.0	000.6637	0588.6	040.4	223.5	001.2600	0361.4	017.0	74.0
190.0	000.6633	0600.3	040.8	224.7	001.2600	0364.3	017.7	73.4
191.0	000.6905	0605.8	041.4	225.5	001.2600	0363.6	018.6	72.7
192.0	000.7182	0602.2	041.6	226.9	001.2600	0361.2	019.2	72.2
193.0	000.7465	0591.0	041.6	228.7	001.2600	0350.3	019.6	71.6
194.0	000.7753	0576.9	041.4	230.7	001.2600	0337.9	019.9	71.0
195.0	000.8046	0565.2	041.3	232.6	001.2600	0318.4	020.2	70.3
196.0	000.8345	0555.4	041.2	234.3	001.2600	0304.0	020.6	69.6
197.0	000.8650	0545.5	041.1	236.0	001.2600	0273.8	021.0	68.4
198.0	000.8960	0535.2	041.0	237.8	001.2600	0254.8	021.3	67.6
199.0	000.9276	0525.6	040.8	239.5	001.2600	0250.6	021.7	67.2