

Part 1 - Channel Study

REFERENCE		CH# 218A - 91.5 MHz, Pwr= 0.42 kW, HAAT= 376.0 M, COR= 1174 M								DISPLAY DATES	
40 54 27.0 N.		Average Protected F(50-50)= 28.5 km								DATA 06-14-08	
122 26 37.0 W.										SEARCH 07-29-08	
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
218A Redding	KKRO	LIC	DCX CA	0.0 180.0	0.80 BLED20070301ABC	40 54 53.0 122 26 37.0	0.370 401	97.9 1210	35.4 Educational Media Foundati	-111.62*	-83.71*
216C2 Redding	950327MA	CP	DCN CA	192.9 12.8	28.89 BPED19950327MA	40 39 14.0 122 31 12.0	1.800 447	2.0 978	21.7 Christian Arts And Educati	-2.82<	5.80
216C2 Redding	950713MB	APP	DCN CA	192.9 12.8	28.89 BPED19950713MB	40 39 14.0 122 31 12.0	1.800 455	1.6 986	19.3 Oregon St Board Of Higher	-2.50<	8.11
219B Chico	KCHO	LIC	CN CA	149.4 329.9	122.26 BLED19860514KD	39 57 30.0 121 42 48.0	7.700 372	80.2 1119	53.8 The Research Foundation, C	6.84	14.43
217C2 Yreka	KNYR	LIC	CN CA	349.1 169.0	79.47 BLED19951012KB	41 36 36.0 122 37 26.0	0.400 721	58.4 1817	38.4 Oregon St Board Of Higher	11.34	27.47
06-2C Eureka	KVIQ	LI	HN CA	261.6 80.6	130.48 BLCT1115	40 43 36.0 123 58 18.0	100.000 530		111.9 Raul Broadcasting Company	114.2R	16.2M
221A Cottonwood	AL3889«	VAC		167.1 347.2	58.30 RM11367	40 23 45.0 122 17 22.0	6.000 100	2.9 262	30.5 Michael R Birdsill	30.5R	27.8M
220A Mccloud	960503MG	APP	CN CA	21.8 201.9	45.99 BPED19960503MG	41 17 30.0 122 14 21.0	0.100 57	0.7 1500	26.7 Fatima Response Inc Db	28.20	18.96
220A Mccloud	950210MA	CP	CN CA	23.1 203.2	52.91 BPED19950210MA	41 20 43.0 122 11 42.0	0.035 724	0.4 2434	27.3 Oregon St Board Of Higher	36.10	25.29
272C1 Weed	KNTK«	LIC	C CA	21.6 201.7	53.90 BLH19991124AAQ	41 21 30.0 122 12 21.0	15.500 592	1.6 2331	17.6 Four Rivers Broadcasting,	21.5R	32.4M
218C3 Bayside	KNHM	CP	DCY CA	261.6 80.6	130.56 BPED20070201BRR	40 43 38.0 123 58 22.0	0.500 525	86.3 910	30.5 Jpr Foundation Inc.	37.09	75.88
218B Willits	KZYZ	LIC	CX CA	202.0 21.5	189.15 BLED20050602ACQ	39 19 35.0 123 16 10.0	1.700 545	105.9 1021	41.0 Mendocino County Public Br	53.32	62.30
220A Hayfork	1214190	APP	ZCX CA	234.3 53.8	78.64 BNPED20071018ALZ	40 29 34.0 123 11 52.0	1.200 297	0.6 1356	17.3 North State Educational Br	61.29	60.33

Terrain database is NGDC 30 SEC Distance + R = FCC Required Spacings in KM, Distance + M = Margin in KM
ERP and HAAT on direct-line with reference station.
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 protected contour.
« = Station meets FCC minimum distance spacing for its class.
"<" = Contour Overlap

* see part 2, waiver request

Part 2 - Request for Waiver of 47 C.F.R. Section 73.509

Educational Media Foundation ("EMF") desires to increase the power and service area of station KKRO, Redding, California. This proposal is engineered so as to NOT CAUSE interference to any existing station, known application or allocation. However, the proposed increased service area would RECEIVE interference from the following second adjacent facilities (see exhibit 16-D and 16-E for a contour map of the interference area):

Facility ID	Status	Call Sign	City of License
10905	CP	950327MA	REDDING, CA
77085	APP	950713MB	REDDING, CA

Again, this proposal will not cause interference to the above application as KKRO's proposed interfering 100 dBu contour will not overlap the applications' protected 60 dBu contour. KKRO's proposed protected contour would, however, receive prohibited overlap from the stations listed above. The area of "overlap received" from the above referenced facilities will be approximately:

Call Sign (or File #)	Square kM	Total area of proposed 60 dBu
950327MA	8.06	0.57%
950713MB	7.35	0.52%

The grant of this waiver request will provide new service to an estimated 10,721 persons, an increase of 16.28%. This waiver request is nearly identical to the requests made by the licensees of WCPE(FM) and WCCE(FM) in Educational Information Corporation, 6 FCC Rcd 2207 (1991). WCPE(FM) requested a waiver in its application to permit *de minimus* overlap "received," and WCCE(FM) requested a waiver in its application to permit *de minimus* overlap "caused." In recognition of the importance of affording noncommercial educational stations the flexibility to expand and meet the growing demand for service, the Commission granted both waiver requests. The instant request fully satisfies the criteria established by the Commission for waiver of Section 73.509 of the Commission's rules as it pertains to overlap received*.

Significant service will be maintained and enhanced by the proposed expansion of KKRO, and the overlap area is very small and well within the scope of the Commission's waiver policy. Clearly, this benefit heavily outweighs the potential for interference in an area that constitutes less than 1% (total) of the station's proposed service area. Accordingly EMF respectfully submits that a waiver of Section 73.509(a) of the Commission's rules is justified in this instance.

* EMF wishes to emphasize that its request is not at all similar to the second waiver request made by WCPE in Educational Information Corporation, 1997 FCC LEXIS 2636 (May 20, 1997). Unlike here, WCPE was seeking a waiver of overlap "caused" in that second case.

Exhibit 16 - A

FMCommander Single Allocation Study
07-30-2008

KKRO CH 218 A
0.42 kW 1174 M COR DA
Prot. = 60 dBu
Intef. = 100 dBu

950327MA CH 216 C2 BPED19950327MA
1.8 kW, 978 M COR DA
Prot. = 60 dBu
Intef. = 100 dBu

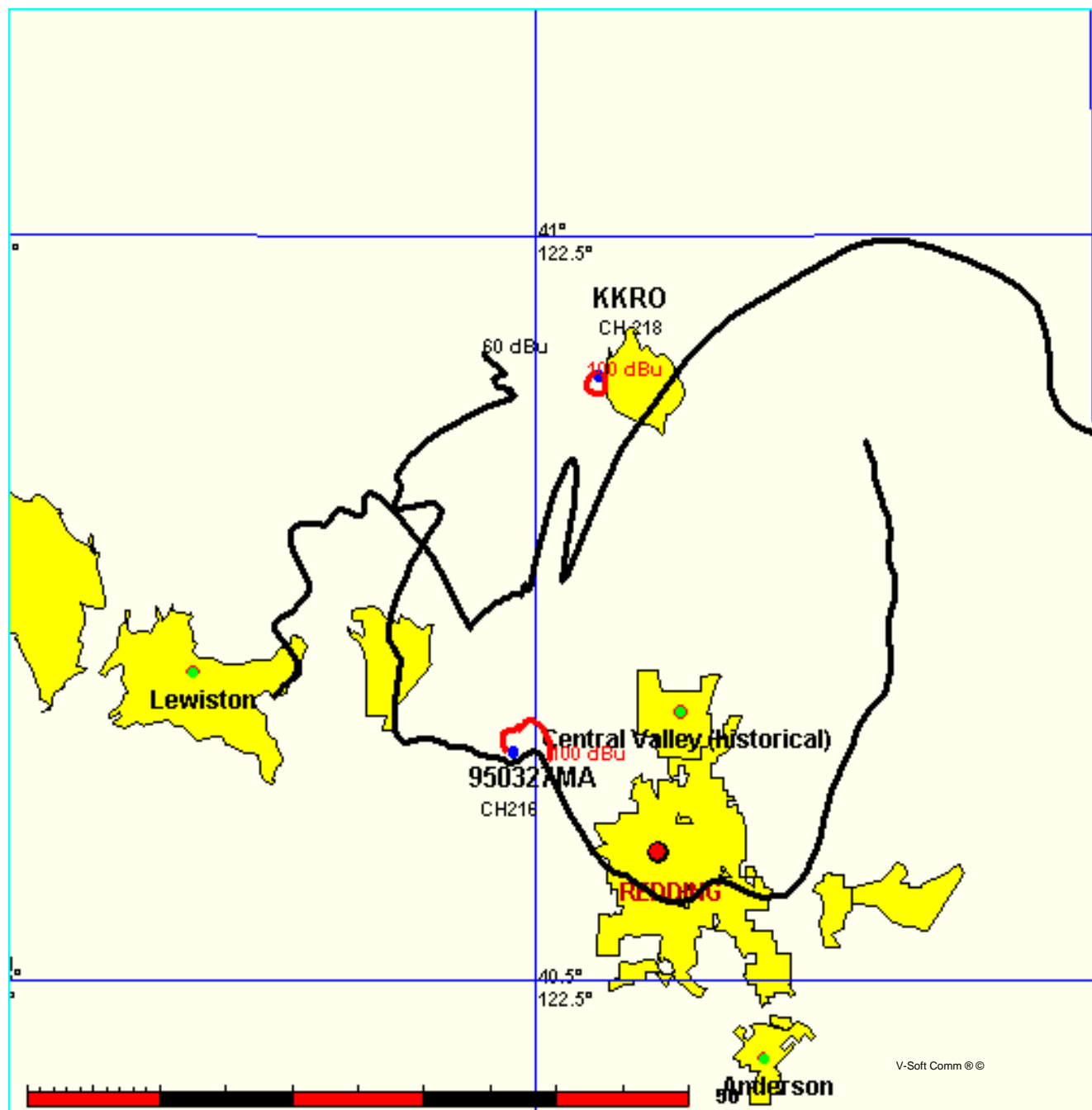


Exhibit 16 - B

FMCommander Single Allocation Study
07-30-2008

KKRO CH 218 A
0.42 kW 1174 M COR DA
Prot. = 60 dBu
Intef. = 100 dBu

950713MB CH 216 C2 BPED19950713MB
1.8 kW, 986 M COR DA
Prot. = 60 dBu
Intef. = 100 dBu

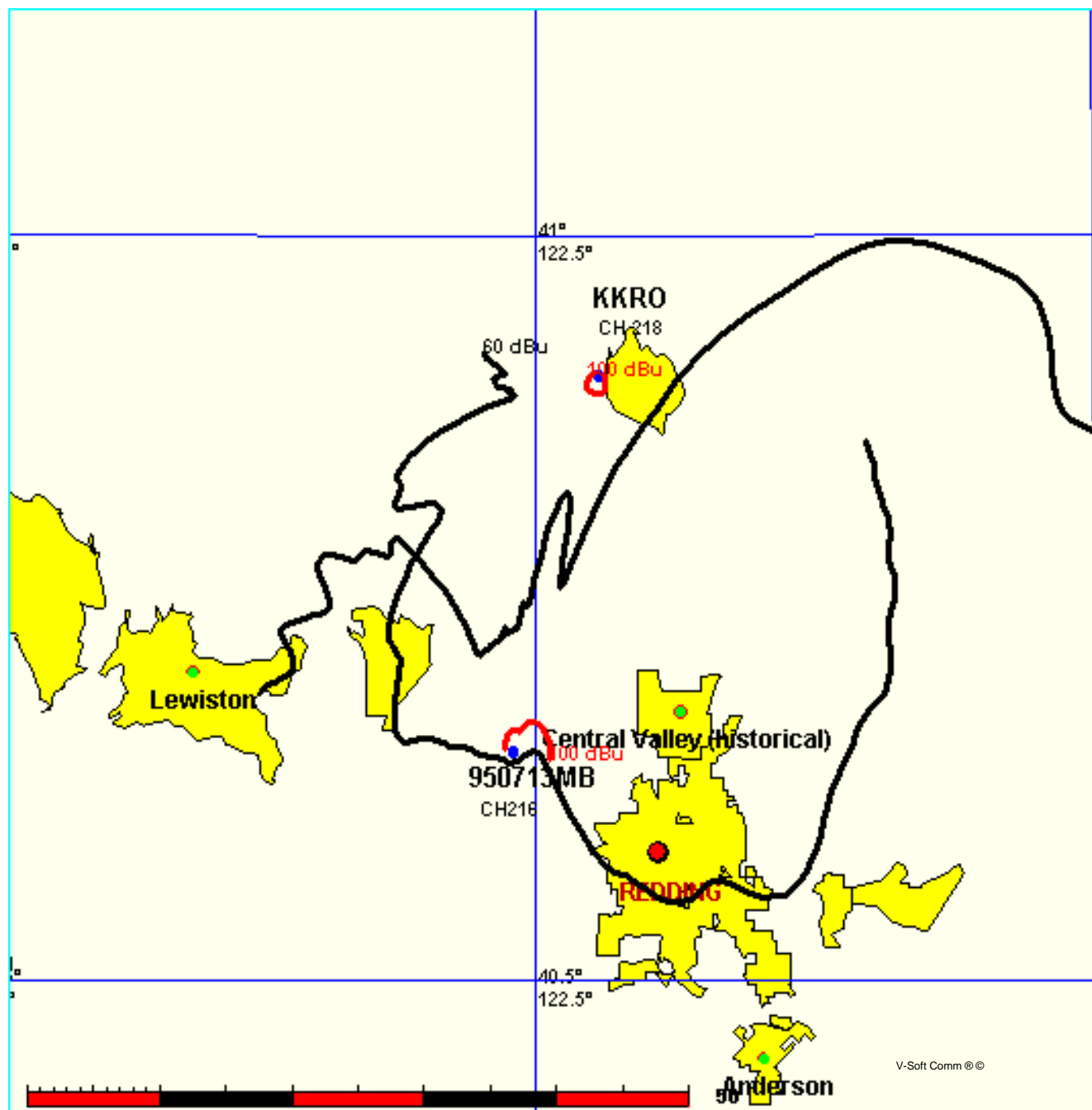
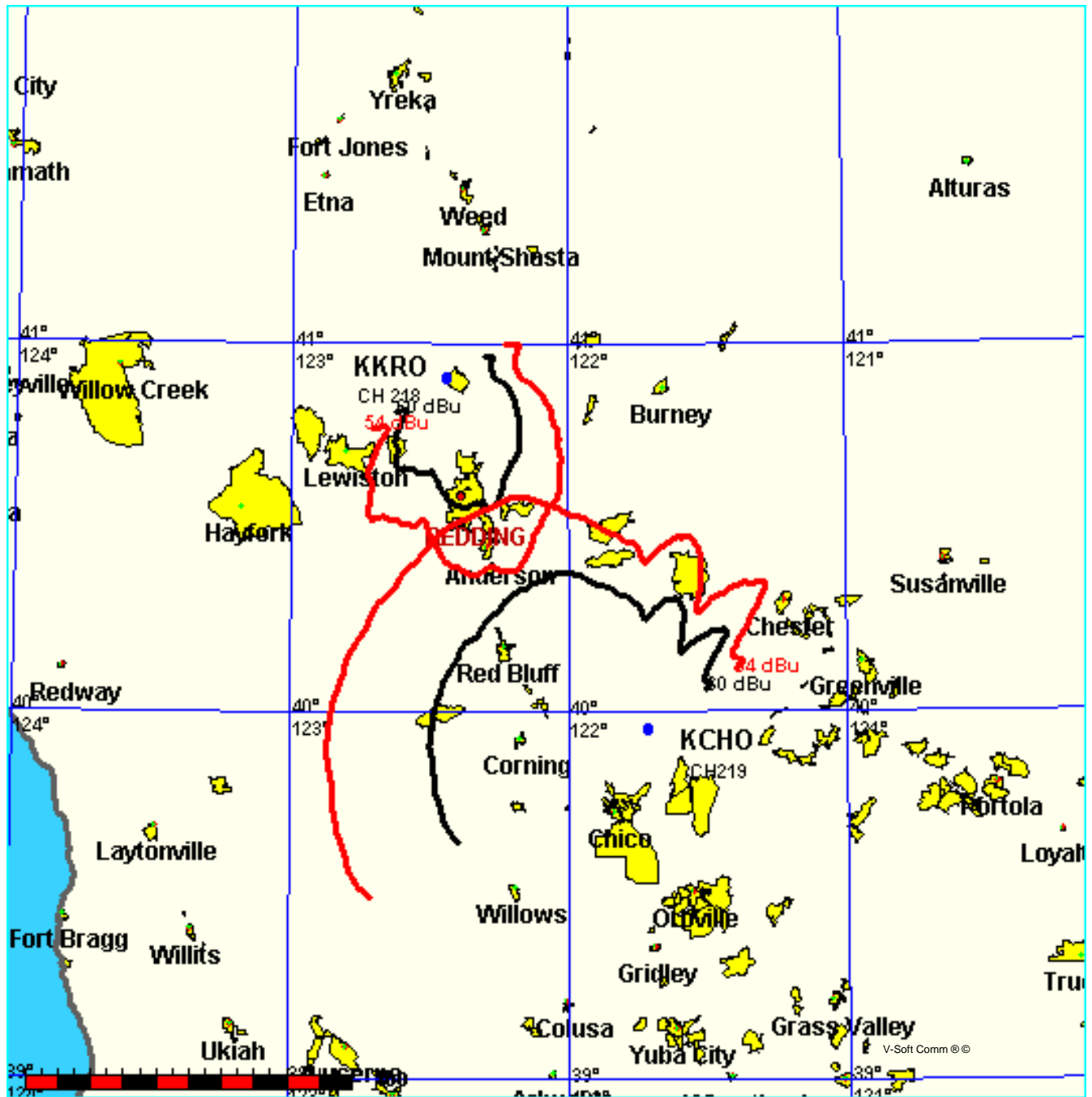


Exhibit 16 - C

FMCommander Single Allocation Study
07-30-2008

KKRO CH 218 A
0.42 kW 1174 M COR DA
Prot. = 60 dBu
Intef. = 54 dBu

KCHO CH 219 B BLED19860514KD
7.7 kW, 1119 M COR
Prot. = 60 dBu
Intef. = 54 dBu



KCHO interfering vs. KKRO protected

07-30-2008 NGDC 30 SEC Terrain Data FMOver Analysis

KKRO
Channel = 218A
Max ERP = 0.42 kW
RCAMSL = 1174 M
N. Lat. 40 54 27.0
W. Lng. 122 26 37.0
Protected
60 dBu

KCHO BLED19860514KD
Channel = 219B
Max ERP = 7.7 kW
RCAMSL = 1119 M
N. Lat. 39 57 30.0
W. Lng. 121 42 48.0
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
154.0	000.3049	0745.2	038.3	327.7	007.7000	0412.7	084.2	53.02
155.0	000.3194	0754.4	039.0	327.2	007.7000	0414.3	083.6	53.27
156.0	000.3342	0761.2	039.6	326.7	007.7000	0415.1	083.1	53.46
157.0	000.3493	0766.9	040.2	326.1	007.7000	0415.4	082.6	53.62
158.0	000.3648	0770.4	040.7	325.6	007.7000	0415.5	082.3	53.74
159.0	000.3806	0769.2	041.1	325.0	007.7000	0415.9	082.1	53.81
160.0	000.3968	0763.9	041.3	324.5	007.7000	0416.9	082.1	53.86
161.0	000.3991	0756.7	041.2	324.1	007.7000	0418.4	082.4	53.78
162.0	000.4014	0748.7	041.0	323.6	007.7000	0420.5	082.8	53.72
163.0	000.4037	0736.8	040.7	323.2	007.7000	0422.9	083.3	53.62
164.0	000.4060	0718.2	040.2	322.9	007.7000	0425.1	084.1	53.44
165.0	000.4083	0694.7	039.5	322.6	007.7000	0426.9	085.0	53.21
166.0	000.4106	0676.0	039.0	322.4	007.7000	0428.8	085.7	53.02
167.0	000.4130	0667.6	038.7	322.0	007.7000	0431.0	086.2	52.93
168.0	000.4153	0672.9	039.0	321.6	007.7000	0433.5	086.3	52.97
169.0	000.4177	0685.5	039.4	321.0	007.7000	0435.3	086.2	53.06
170.0	000.4200	0694.6	039.7	320.5	007.7000	0436.4	086.3	53.08
171.0	000.4200	0697.7	039.8	320.1	007.7000	0437.1	086.5	53.01

Exhibit 16 - D

950327MA.C

BPED19950327MA
Latitude: 40-39-14 N
Longitude: 122-31-12 W
ERP: 1.80 kW
Channel: 216
Frequency: 91.1 MHz
AMSL Height: 978.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

KKRO

Latitude: 40-54-27 N
Longitude: 122-26-37 W
ERP: 0.42 kW
Channel: 218
Frequency: 91.5 MHz
AMSL Height: 1174.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

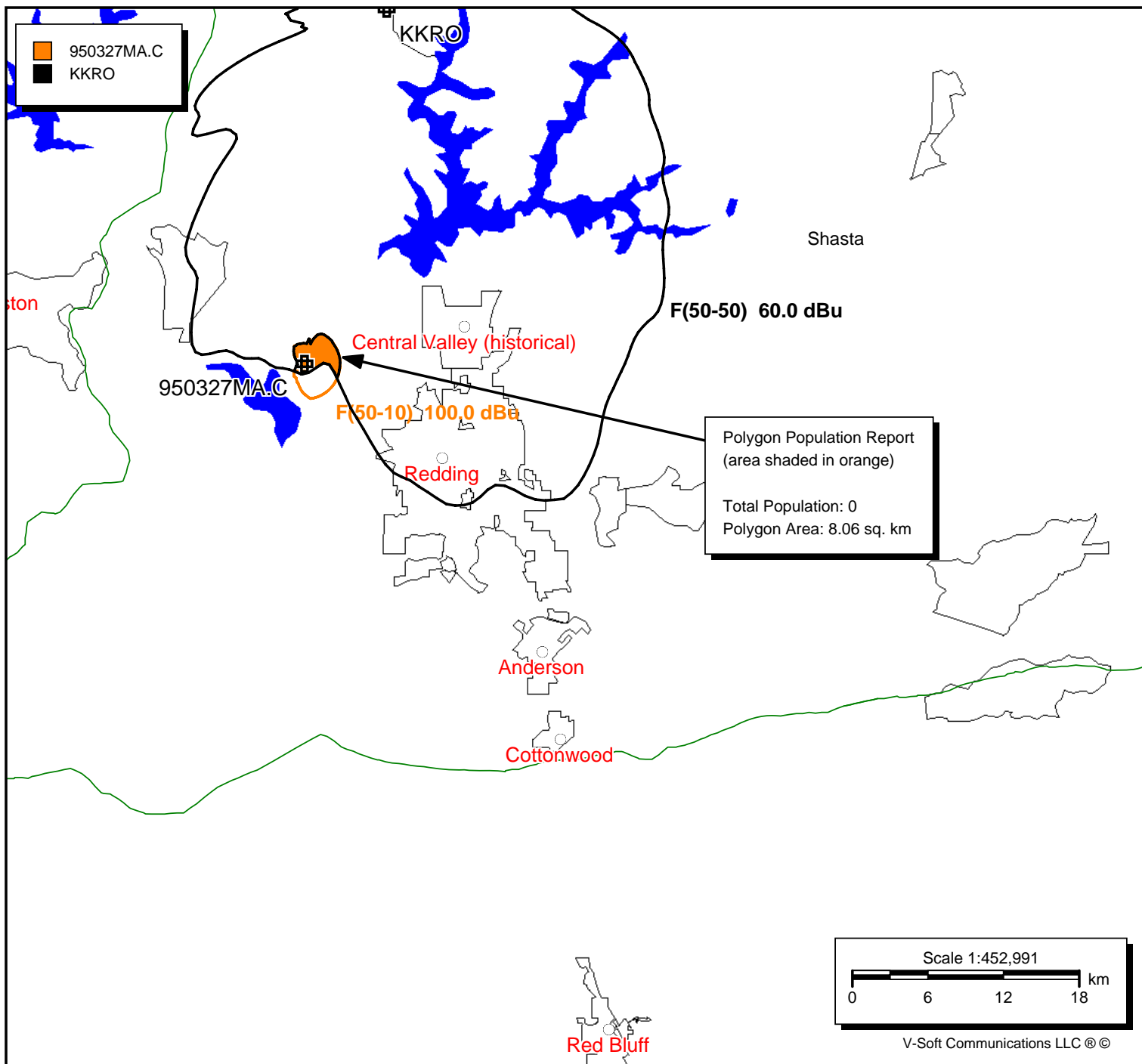


Exhibit 16 - E

950713MB.A

BPED19950713MB

Latitude: 40-39-14 N

Longitude: 122-31-12 W

ERP: 1.80 kW

Channel: 216

Frequency: 91.1 MHz

AMSL Height: 986.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model: None

KKRO

Latitude: 40-54-27 N

Longitude: 122-26-37 W

ERP: 0.42 kW

Channel: 218

Frequency: 91.5 MHz

AMSL Height: 1174.0 m

Horiz. Pattern: Directional

Vert. Pattern: No

Prop Model: None

