

KRRF CP MINOR MODIFICATION

This technical report has been developed in support of an application for a minor modification to the KRRF construction permit at Oak View, CA – BPH-20110218ABV.

- E1 KRRF spacing study
- E2 70 dBu coverage of Oak View, CA
- E3 HAAT and contour tabulation
- E4 ASR #1014800

KRRF allocation analysis:

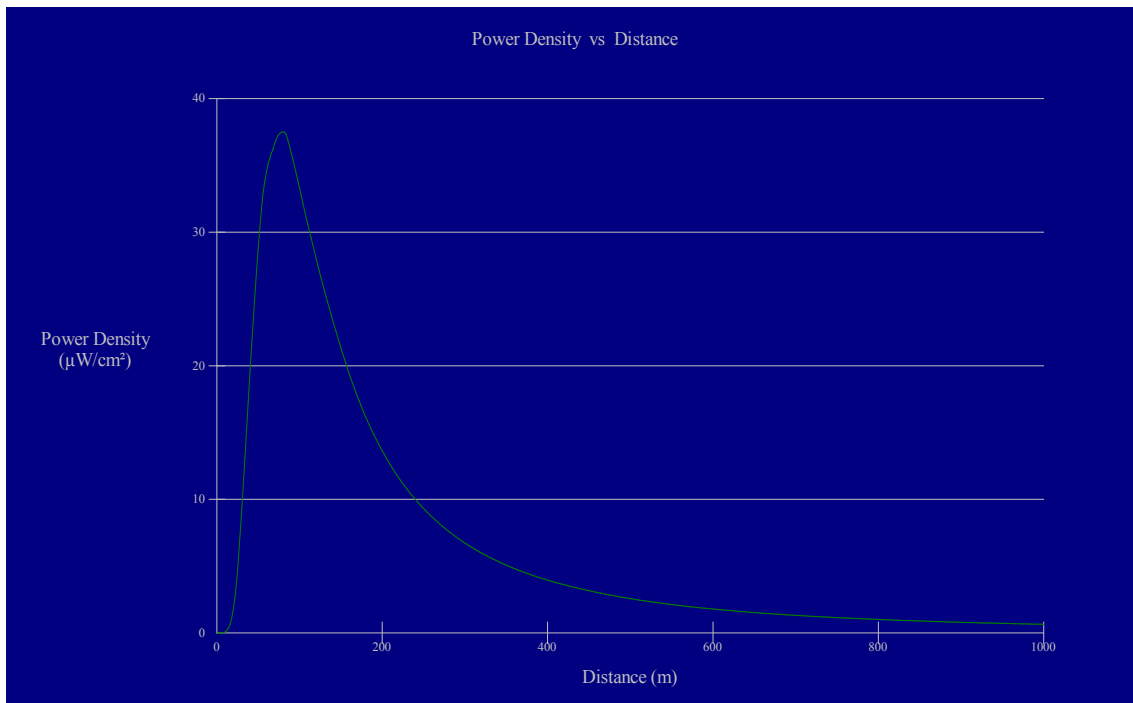
Exhibit E1 demonstrates that KRRF is fully spaced on channel 292A at its construction permit site. Seventy (70) dBu coverage is provided to the entire community of Oak View, CA as evidenced in exhibit E2. The antenna height above ground is reduced to 41 meters resulting in an HAAT of 252 meters (see E3) with an ERP of 0.96 kW producing a maximum class A 60 dBu of 28.42 km. The V-Soft NED 30 meter terrain database was utilized to determine HAAT.

Site and antenna and RF calculation:

The KRRF facility will utilize an ERI two bay one-half wave spaced LPX-2E-HW antenna at:

N 34-17-47 W 119-16-21 (NAD 27 - ASR#1014800).

The RF contribution of the proposed facility was calculated using the Commission's FMMODEL program to be $37.5 \mu\text{W}/\text{cm}^2$ at 80 meters which is only 18.75% of the maximum permissible for general public exposure.



The only other broadcast facility on this tower or nearby is a CP for FM translator K210CH at 10 Watts and seven (7) meters AGL. The K210CH RF contribution has been determined to be 18.7 μ Watts/cm² or 9.35% of the maximum general public exposure limit using a worst case vertical factor of 1.0 and the formula:

$$(RF \text{ in } \mu\text{Watts/cm}^2) = \frac{33.4 \times F^2 - \text{Vert Factor}) \times (H \text{ ERP} + V \text{ ERP in Watts})}{R^2 \text{ (distance to radiation center in meters-2 m)}}$$

The combined RF contribution for the two facilities is 28.1% which complies with Commission requirements.

Conclusion:

It is concluded that the KRRF CP minor modification is in full compliance with the Commission rules and policies.

E1 KRRF CHANNEL STUDY

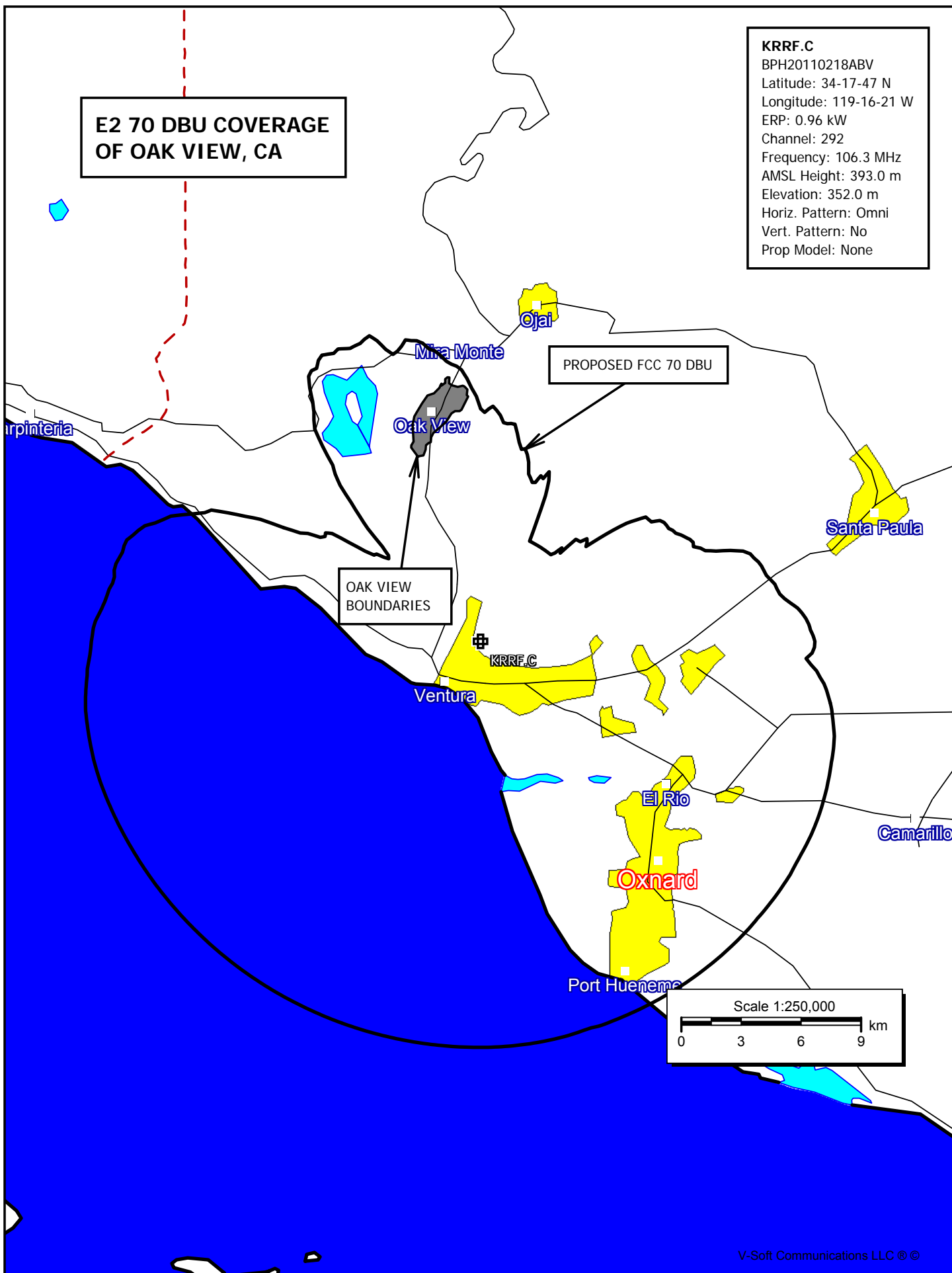
REFERENCE		DISPLAY DATES
34 17 47.0 N.	CLASS = A Int = AA	DATA 11-11-11
119 16 21.0 W.	Current Spacings to 3rd Adj.	SEARCH 11-11-11
----- Channel 292 - 106.3 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
KRRF	CP 292A	Oak View	CA 0.0	0.0	114.5	-114.5
KRRF	LIC 292A	Goleta	CA 297.0	41.7	114.5	-72.8
KGMX	CP -N 292A	Lancaster	CA 64.3	116.5	114.5	2.0
KGMX	LIC 292A	Lancaster	CA 64.3	116.5	114.5	2.0
KEAL	LIC 293A	Taft	CA 349.1	90.2	71.5	18.7
KROQ-FM	LIC 294B	Pasadena	CA 96.5	94.1	68.5	25.6
KALI-FM	LIC-N 292A	Santa Ana	CA 114.3	144.0	114.5	29.5
KRAB	LIC-Z 291B1	Greenacres	CA 22.6	127.9	95.5	32.5
KRAZ	LIC-Z 290A	Santa Ynez	CA 292.3	68.0	30.5	37.5
KPWR	LIC-D 290B	Los Angeles	CA 93.6	111.3	68.5	42.8

Reference station has protected zone issue: Mexico

**E2 70 DBU COVERAGE
OF OAK VIEW, CA**

KRRF.C
BPH20110218ABV
Latitude: 34-17-47 N
Longitude: 119-16-21 W
ERP: 0.96 kW
Channel: 292
Frequency: 106.3 MHz
AMSL Height: 393.0 m
Elevation: 352.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None



E3 CONTOURS AND HAAT

N. Lat. = 341747.0 W. Lng. = 1191621.0
HAAT and Distance to Contour,
V-Soft 3-16 km, 131 pts Method - NED 30 Meter

Azi.	AV EL	HAAT	dBk	70-F5	60-F5
000	261.0	132.0	-0.46	11.46	20.77
045	344.6	48.4	-0.46	6.93	12.44
090	126.4	266.6	-0.46	16.43	28.76
135	29.0	364.0	-0.46	19.27	33.71
180	0.3	392.7	-0.46	19.98	34.89
225	0.2	392.8	-0.46	19.98	34.89
270	33.5	359.5	-0.46	19.16	33.50
315	331.8	61.2	-0.46	7.84	13.92

Ave El= 140.84 M HAAT= 252.16 M AMSL= 393 Mge 1

E4 Registration 1014800

 [Map Registration](#)

Registration Detail

Reg Number	1014800	Status	Constructed
File Number	A0564153	Constructed	12/28/1960
FAA Study	2003-AWP-2548-OE	EMI	No
FAA Issue Date	09/08/2003	NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long	34-17-47.0 N 119-16-24.0 W	(HALL CANYON #89321--CAN) 3 miles North of East Main
City, State	VENTURA , CA	
Center of AM Array		

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
352.3	63.1
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
415.4	61.0

Painting and Lighting Specifications

FAA Chapters 4, 8, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K

Owner & Contact Information

FRN	0005885231	Licensee ID	L00008376
Assignor FRN	0006156145	Assignor ID	L00008376

Owner

American Towers, Inc. Attention To: FAA/FCC Compliance Dept. 1101 Perimeter Drive Schaumburg , IL 60173	P: (847)240-1508 E: ATCfaa-fccmidwest@americantower.com
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Contact

Compliance Dept. , FAA/FCC 1101 Perimeter Drive Schaumburg , IL 60173	P: (847)240-1508 E: ATCfaa-fccmidwest@americantower.com
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Last Action Status

Status	Constructed	Received	10/03/2007
Purpose	Change Owner	Entered	10/03/2007
Mode	Interactive		

Related Applications

10/03/2007	A0564153 - Change Owner (OC)
01/10/2006	A0485777 - Admin Update (AU)
09/16/2003	A0343614 - Modification (MD) 2.fcc.gov/UlsApp/AsrSearch/asrRegistration.jsp?regKey=...