# Goldman Engineering Management Auburn, CA

### **KBLX-FM**

### APPLICATION FOR NEW ON-CHANNEL BOOSTER

This technical statement and attached exhibits have been prepared on behalf of Bonneville International Corporation, Licensee of station KBLX-FM, Channel 275B, Berkeley, CA, Facility identifier 28670 for an on-channel FM booster to cover the community of Pittsburg, CA which is terrain blocked to the primary KBLX-FM signal.

### **FACILITIES REQUESTED**

The requested facility will operate within the 54dBu contour of KBLX-FM. A map showing the coverage of this booster in relationship to the KBLX-FM signal is shown in Exhibit A. The antenna proposed is a Jampro dual element, single level log-periodic antenna rotated 45 degrees from vertical to achieve slant H+V polarization. The Azimuth Pattern is attached as Exhibit C.

#### TECHNICAL SPECIFICATIONS

Booster Location: Pittsburg, CA

ASR ASR 1057624 (Exhibit D)

Geographic Coordinates (NAD83): 38°01'16.5" N, 121° 59' 16.1" W

Channel: 275 (102.9 MHz) Effective Radiated Power: 300 W (H+V)

Antenna Type, Pattern: Jampro JAVA 1-1 (2) (Exhibit C)

Antenna Orientation: 128° True
Site Height AMSL 170m
Tower OAGL 58m

Antenna Height:

Above ground: 31m Above mean sea level: 201m As shown in Exhibit A the 54dBu contour of the booster will fall inside the 54dBu contour of KBLX-FM (275B)

and is thus compliant with 74.1232(f). As shown in Exhibit B, the proposed booster will provide interference protection to

all first adjacent channel stations because the first adjacent interfering contours are within the KBLX-FM interfering

contours. KBLX-FM is not short-spaced to any first adjacent stations. The proposed booster is 15.9km spaced to IF

related KKDV (221A, 54 channels removed), there is no IF issue from this location.

**ENVIRONMENTAL CONSIDERATIONS** 

The Booster will be attached at the 31m height on an existing 60m tower. Because there will be no modifications

to this tower it is exempt from environmental processing under CFR Section 1.1306.

The proposed KBLX-FM booster antenna was evaluated for RF energy at ground level. The closest antenna type

for analysis is a EPA Type 2 antenna. As such, the estimated RF at 2m AGL is expected to be 6.6µW/cm<sup>2</sup>, 3.3% of the

maximum allowable 200µW/cm<sup>2</sup> NIER. Since this is under 5% of the maximum allowable NIER, it is believed that this

facility is exempt from further environmental assessment under 47CFR 1.1306 and 1.1307.

The applicant agrees to reduce power or cease operations when it becomes necessary if workers are near the

antenna in order to ensure that they will not be exposed to levels of radio frequency electromagnetic radiation that exceed

FCC guidelines.

**CERTIFICATION** 

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or

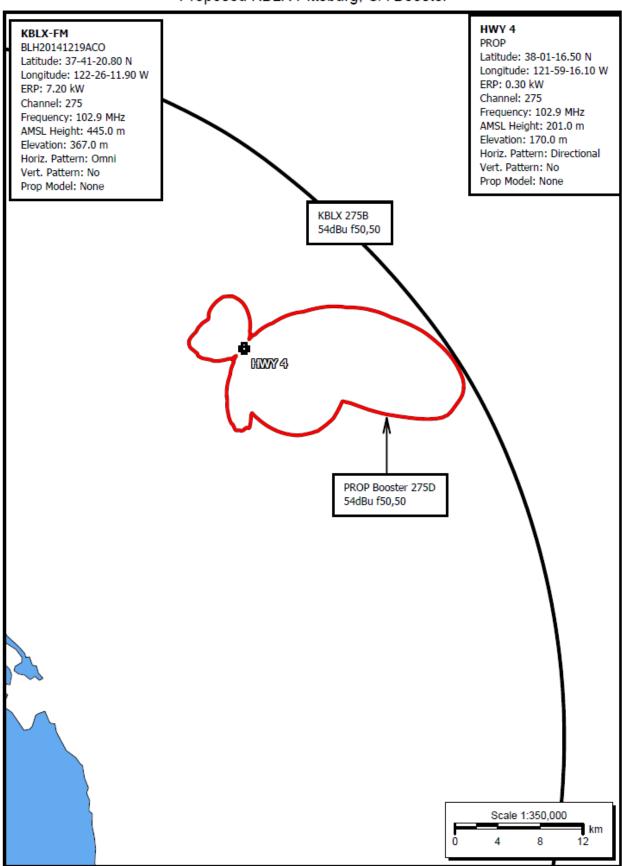
under his direct supervision, and that they are true and correct to the best of his knowledge and belief.

Bertram S. Goldman

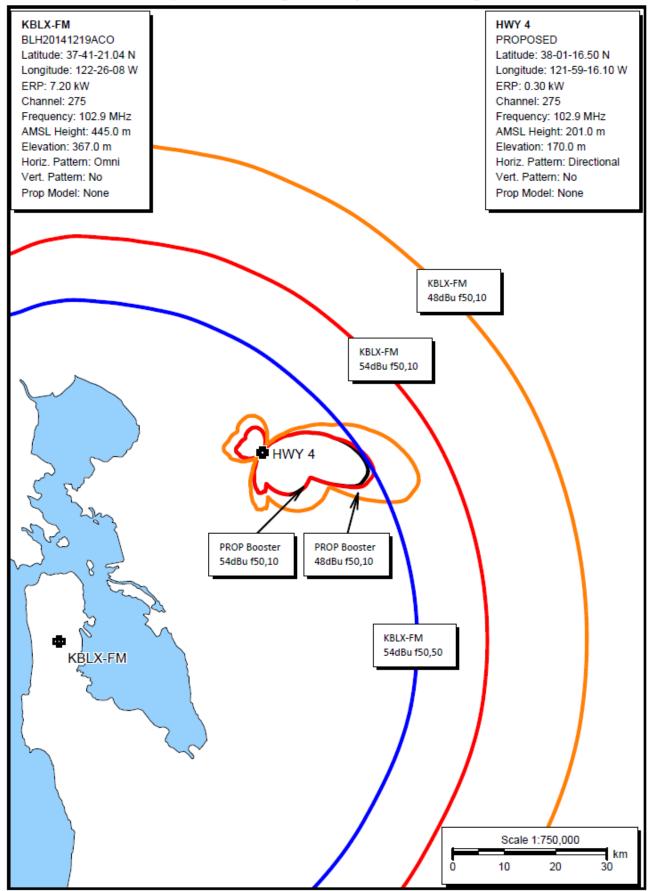
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# Proposed KBLX Pittsburg, CA Booster



# KBLX Proposed "Pittsburg" First Adjacent Interfering Contours

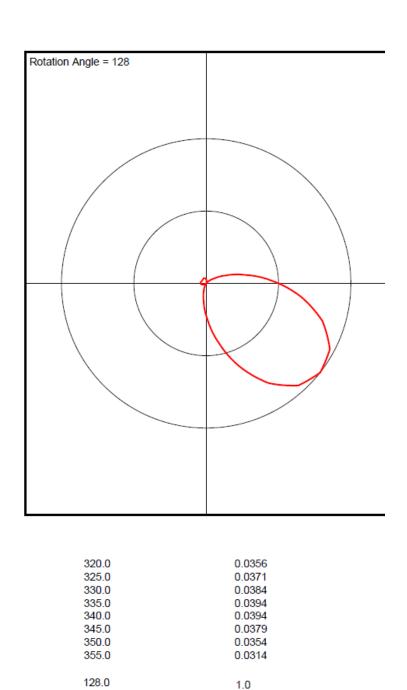


### EXHIBIT C- Antenna Pattern

Hwy 4 Antenna Pattern

Post-Rotation Antenna Pattem....

Azimuth (deg)	Relative Field
0.0	0.0268
5.0	0.0213
10.0	0.016
15.0	0.011
20.0	0.0072
25.0	0.0052
30.0	0.0048
35.0 40.0	0.0068 0.0108
45.0	0.0108
50.0	0.03
55.0	0.05
60.0	0.0786
65.0	0.1201
70.0	0.1718
75.0	0.2388
80.0	0.3152
85.0	0.4057
90.0	0.5002
95.0 100.0	0.6007 0.6978
105.0	0.7898
110.0	0.8696
115.0	0.9311
120.0	0.9744
125.0	0.9904
130.0	0.99
135.0	0.965
140.0	0.9224
145.0	0.8534
150.0	0.7738
155.0 160.0	0.6783 0.581
165.0	0.481
170.0	0.3864
175.0	0.2999
180.0	0.2232
185.0	0.1612
190.0	0.1094
195.0	0.0729
200.0	0.0444
205.0	0.0279
210.0 215.0	0.0158 0.0103
220.0	0.0064
225.0	0.0049
230.0	0.0054
235.0	0.0089
240.0	0.0132
245.0	0.0187
250.0	0.0242
255.0	0.0297
260.0	0.0342
265.0	0.0372
270.0	0.0392 0.0397
275.0 280.0	0.0394
285.0	0.0379
290.0	0.0364
295.0	0.0349
300.0	0.0338
305.0	0.0333
310.0	0.0334
315.0	0.0344



### **EXHIBIT D- ASR REGISTRATION**

# Registration 1057624

### Map Registration

**Registration Detail** 

Reg Number 1057624 Status Constructed File Number A0816921 Constructed 08/20/2001

EMI No Dismantled

NEPA No

**Antenna Structure** 

Structure Type LTOWER - Lattice Tower

Location (in NAD83 Coordinates)

Lat/Long 38-01-16.5 N 121-59-16.1 W Address 4709 Evora Road (#8628)

City, State Shore Acres, CA

Zip 94565 County CONTRA COSTA

Center of Position of Tower

AM Array in Array

Heights (meters)

Elevation of Site Above Mean Sea Level Overall Height Above Ground (AGL)

170.4 57.6

Overall Height Above Mean Sea Level Overall Height Above Ground w/o Appurtenances

228.0 56.4

**Painting and Lighting Specifications** 

None

**FAA Notification** 

FAA Study 2012-AWP-4473-OE FAA Issue Date 07/24/2012

**Owner & Contact Information** 

FRN 0011498342 Owner Entity Limited Liability Company

Type

Assignor FRN 0005885231 Assignor ID L00008376

Owner

American Towers, LLC. P: (678)564-3236

Attention To: Regulatory Compliance FAA FCC F

10 Presidential Way E: faa-fcc@americantower.com

Woburn , MA 01801

Contact

Attention To: FAA FCC P: (678)564-3236

10 Presidential Way

Woburn , MA 01801 E: faa-fcc@americantower.com

**Last Action Status** 

Status Constructed Received 01/15/2013
Purpose Change Owner Entered 01/15/2013

Mode Interactive

**Related Applications** 

01/15/2013 A0816921 - Change Owner (OC)