

**Goldman Engineering Management**  
**Auburn, CA**

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**KSJO (FM)**

**APPLICATION FOR NEW ON-CHANNEL BOOSTER**

This technical statement and attached exhibits have been prepared on behalf of UNIVERSAL MEDIA ACCESS - KSJO-FM, LLC, ("Universal") Licensee of station KSJO (FM), Channel 222B, San Jose, CA, Facility identifier 4117 for an on-channel FM booster.

**FACILITIES REQUESTED**

The requested facility will operate within the 54dBu contour of KSJO. A map showing the coverage of this booster in relationship to the KSJO signal is shown in Exhibit A. The antenna being used is a non-directional Jampro JLLP-1 antenna.

The technical facility proposed is as follows:

Requested Call Letters	KSJO-FM1
Booster Location:	Pleasanton, CA
ASR	ASR 1015996 (Attached Exhibit C)
Geographic Coordinates (NAD83):	37°39'34" N, 121°55'59.5" W
Geographic Coordinates (NAD27):	37°39'34.2" N, 121°55'55.6" W
Channel:	222 (92.3 MHz)
Effective Radiated Power:	67 W
Antenna Type, Pattern:	Jampro JLLP-1
Antenna Orientation:	Non-Directional
Site Height AMSL	454m
Tower OAGL	97m
Antenna Height :	
Above ground:	34m
Above mean sea level:	488m

**74.1232(f) Compliance**

As shown in Exhibit A, the 54dBu contour of the booster will fall inside the 54dBu contour of KSJO (FM) and is thus compliant with 74.1232(f).

#### **74.1204(i) Compliance**

The proposed KSJO (FM) booster is short-spaced and grandfathered to a class A FM station operating pursuant to Section 73.213 of the Commission's rules. That first adjacent facility is KKDV (FM), Walnut Creek, CA (Facility ID: 36032) (Channel 221A). Section 74.1204(i) informs that potential interference to short-spaced stations from FM boosters should be analyzed differently than boosters that are compliant with Section 73.207. Specifically, it provides:

*(i) FM booster stations shall be subject to the requirement that the signal of any first adjacent channel station must exceed the signal of the booster station by 6 dB at all points within the protected contour of any first adjacent channel station, except that in the case of FM stations on adjacent channels at spacings that do not meet the minimum distance separations specified in §73.207 of this chapter, the signal of any first adjacent channel station must exceed the signal of the booster by 6 dB at any point within the predicted interference free contour of the adjacent channel station.*

Universal has performed a detailed analysis in order to demonstrate that the proposed booster will not cause any impermissible interference to first adjacent Station KKDV and that the Station KKDV signal will exceed the signal of the proposed KSJO booster by at least 6dB at any point within the predicted interference free contour of Station KKDV and accordingly, that the proposed KSJO booster will be compliant with Section 74.1204(i). The interference analysis is attached as Exhibit B.

#### **ENVIRONMENTAL CONSIDERATIONS**

The Booster will be attached at the 34m height on an existing 97m tower (ASR 1015996). Because there will be no modifications to this tower it is exempt from environmental processing under CFR Section 1.1306.

The proposed KSJO booster antenna was evaluated for RF energy at ground level. RF fields were calculated using the FCC "FM Model" calculator<sup>1</sup> using a worst-case EPA Type 1 antenna. With the proposed 67 watt ERP (H+V), the RF field was calculated at 2.6μW/cm<sup>2</sup> which is 1.3% of the maximum allowable 200 μW/cm<sup>2</sup> allowable limit for public exposure. Because the calculated emission from the proposed booster antenna is expected to be less than 5% of the

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<sup>1</sup> <https://www.fcc.gov/general/fm-model>

permitted 200 $\mu$ W/cm<sup>2</sup> at 2m above ground level, the facility is categorically 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**

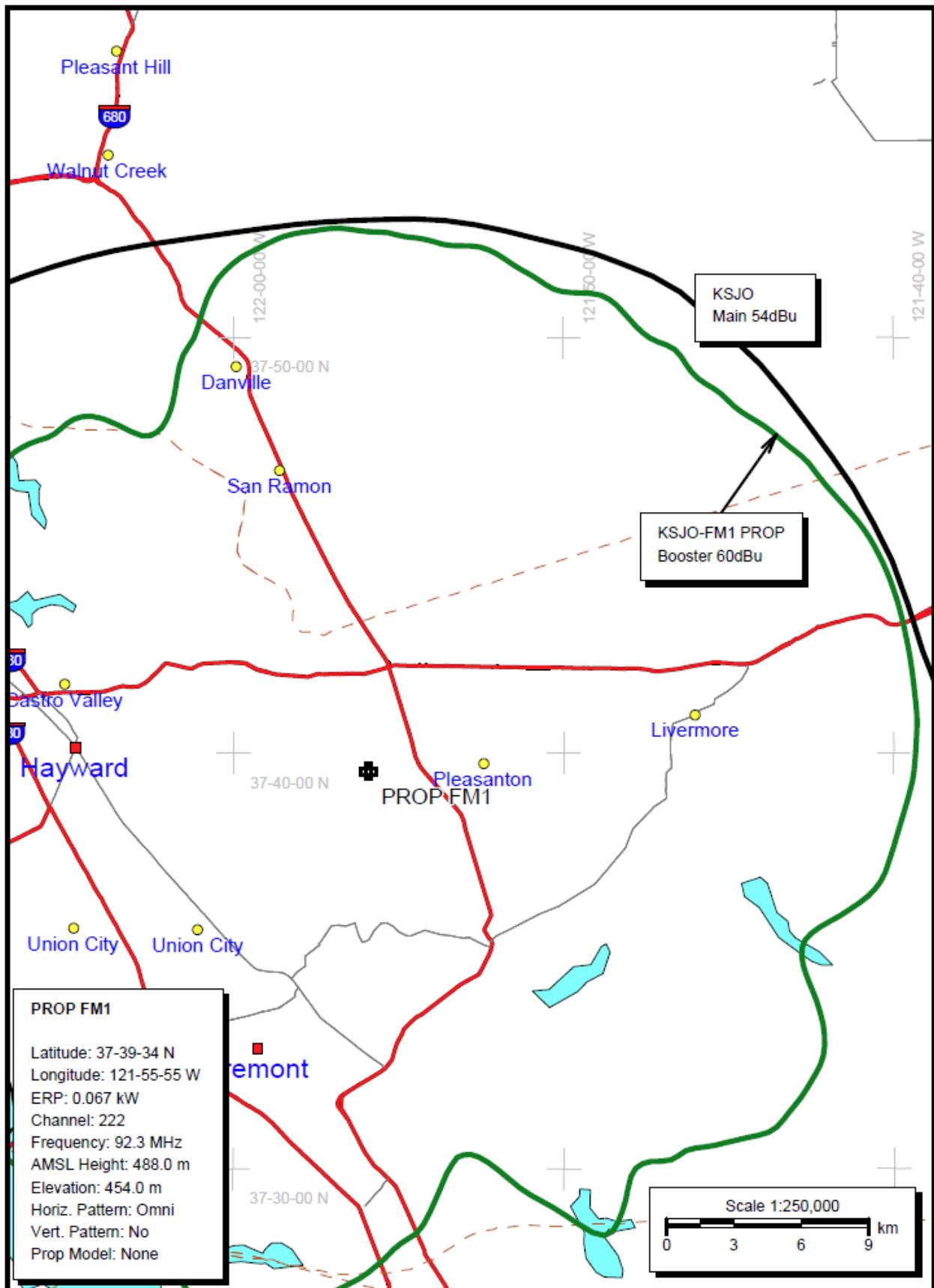
The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direct supervision, and that they are true and correct to the best of his knowledge and belief.



Bertram S. Goldman  
Goldman Engineering Management

EXHIBIT A- 74.1232(f) Compliance

KSJO FCC 54dBu Booster to Main



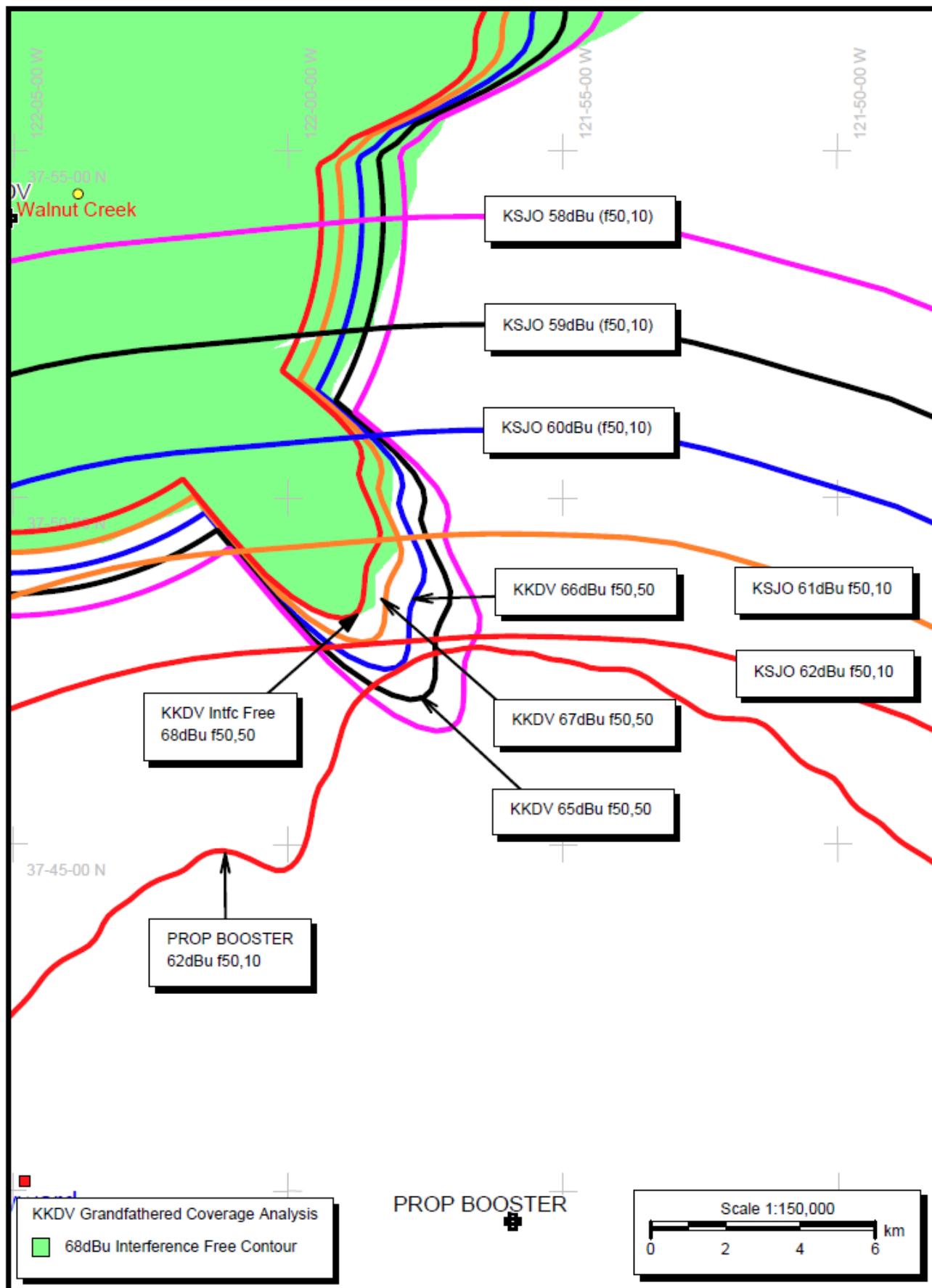
## EXHIBIT B- 74.1204(i) First- Adjacent Protection

### METHODOLOGY

In order to demonstrate compliance with Section 74.1204(i), the following methodology was followed:

1. Analyze the licensed main Station KSJO and first adjacent Station KKDV signals to determine the interference-free contour of Station KKDV and plot that interference-free contour on a map.
2. Plot the proposed booster interfering contour determine the area within which the booster is 6dB or more below the relevant KKDV (68dBu Interference Free) contour.
3. Verify that the entire area where the proposed KSJO booster is in excess of 6dB below the KKDV signal, that area is outside the Station KKDV calculated interference-free contour as determined in Item 1.

## Proposed KSJO Booster to KKDV Interference Free Coverage Analysis



## EXHIBIT C- ASR

### Registration 1015996

 [Map Registration](#)

#### Registration Detail

Reg Number	1015996	Status	Constructed
File Number	A0816297	Constructed	10/01/1997
EMI	No	Dismantled	
NEPA	No		

#### Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

#### Location (in NAD83 Coordinates)

Lat/Long	37-39-34.0 N 121-55-59.5 W	Address	9570 Santos Ranch Road (Pleasanton #1014)
City, State	Pleasanton , CA		
Zip	94588	County	ALAMEDA
Center of AM Array		Position of Tower in Array	

#### Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
453.5	96.6
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
550.1	96.6

#### Painting and Lighting Specifications

FAA Chapters 4, 8, 12

Paint and Light in Accordance with FAA Circular Number 70/7460-1K

#### FAA Notification

FAA Study	2011-AWP-4805-OE	FAA Issue Date	08/23/2011
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#### Owner & Contact Information

FRN	0011498342	Owner Entity Type	Limited Liability Company
Assignor FRN	0005885231	Assignor ID	L00008376

#### Owner

American Towers LLC  
Attention To: Regulatory Compliance FAA FCC  
10 Presidential Way  
Woburn , MA 01801

P: (678)564-3236  
F:  
E: faa-fcc@americantower.com

#### Contact

Attention To: FAA FCC  
10 Presidential Way  
Woburn , MA 01801

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F:  
E: faa-fcc@americantower.com

#### Last Action Status

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