

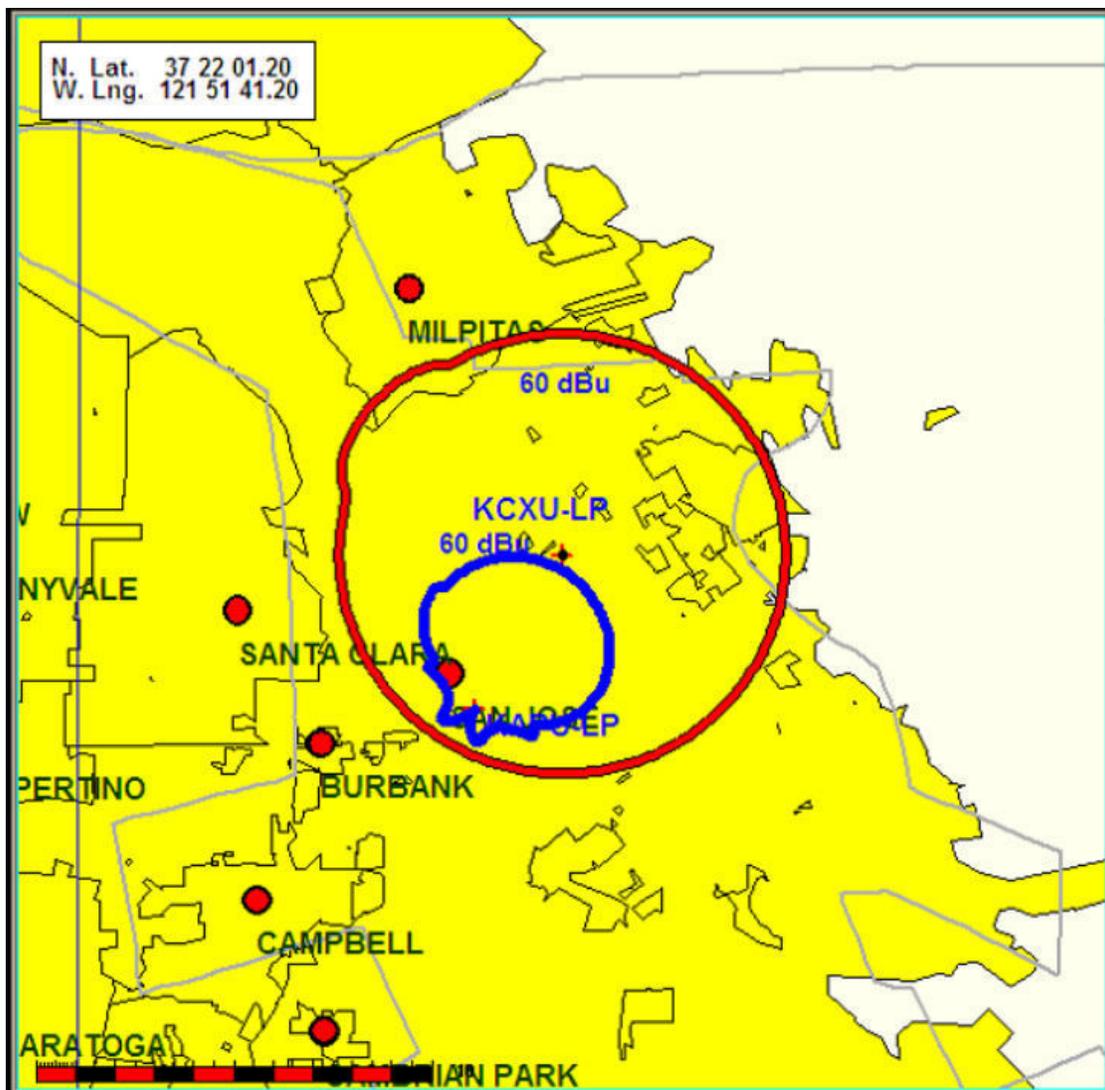
KCXU-LP – San Jose, California - Facility ID# 192235  
**Amended Exhibit for Special Temporary Authority - January 2021**

Exhibit for extension of Engineering STA is amended to correct conversions of coordinates between NAD 27 and NAD 83, with updated field strength calculations.  
CDBS is not permitting amendment of pending extension to BSTA-20200709AAB.

Engineering STA is requested to allow for continued operations from interim location near downtown. Due to extended shutdown orders during COVID-19 pandemic, access to both the main studio and the original antenna tower site remain limited.

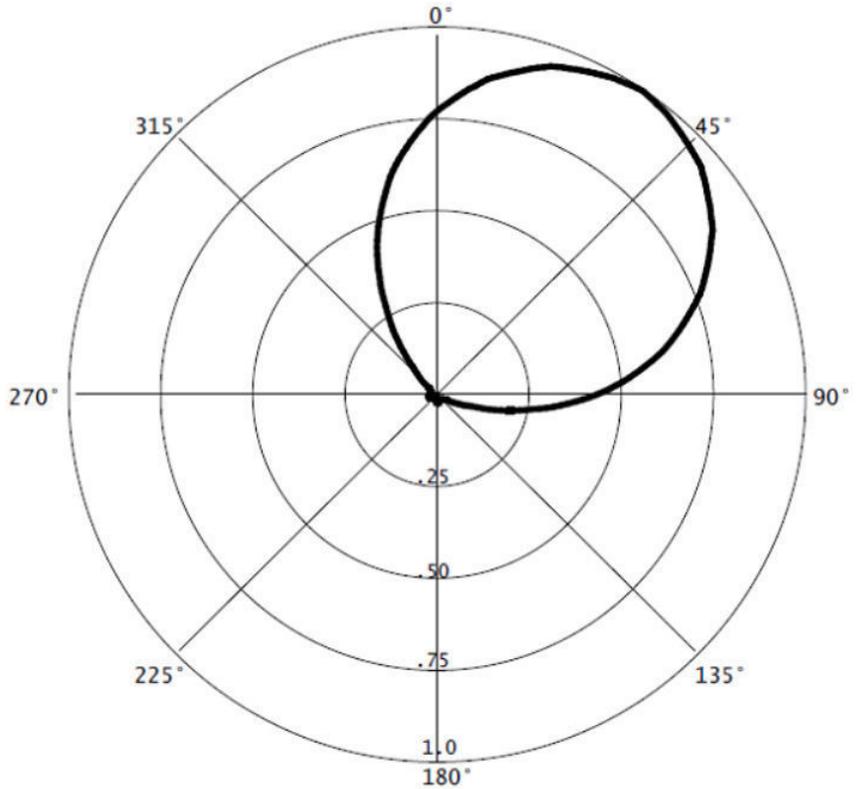
With an SCA CA2 antenna at 30 watts ERP, contour of STA facility is contained within main 60 dBu contour. Height of antenna structure extends 4.5 meters over the AC unit housing structure on the roof. Field values for proposed antenna attached below.

Second adjacent channel exhibit is provided in support of waiver requested pursuant to Section 73.807(e)(1) with respect to KSJO. FM Model calculations also demonstrate no population will be subject to harmful interference.



Graph is Relative Field

Azi	Field	dbk	kw
000	0.775	-17.300	0.019
010	0.880	-16.197	0.024
020	0.953	-15.505	0.028
030	0.991	-15.165	0.030
040	0.985	-15.218	0.030
050	0.941	-15.615	0.027
060	0.861	-16.386	0.023
070	0.750	-17.585	0.017
080	0.608	-19.408	0.011
090	0.434	-22.337	0.006
100	0.244	-27.339	0.002
110	0.092	-35.811	0.000
120	0.027	-46.459	0.000
130	0.020	-49.066	0.000
140	0.018	-49.981	0.000
150	0.018	-49.981	0.000
160	0.018	-49.981	0.000
170	0.022	-48.238	0.000
180	0.022	-48.238	0.000
190	0.015	-51.565	0.000
200	0.007	-58.184	0.000
210	0.002	-69.066	0.000
220	0.002	-69.066	0.000
230	0.008	-57.025	0.000
240	0.017	-50.477	0.000
250	0.023	-47.852	0.000
260	0.022	-48.238	0.000
270	0.018	-49.981	0.000
280	0.018	-49.981	0.000
290	0.018	-49.981	0.000
300	0.021	-48.642	0.000
310	0.035	-44.205	0.000
320	0.115	-33.872	0.000
330	0.279	-26.174	0.002
340	0.470	-21.644	0.007
350	0.639	-18.976	0.013

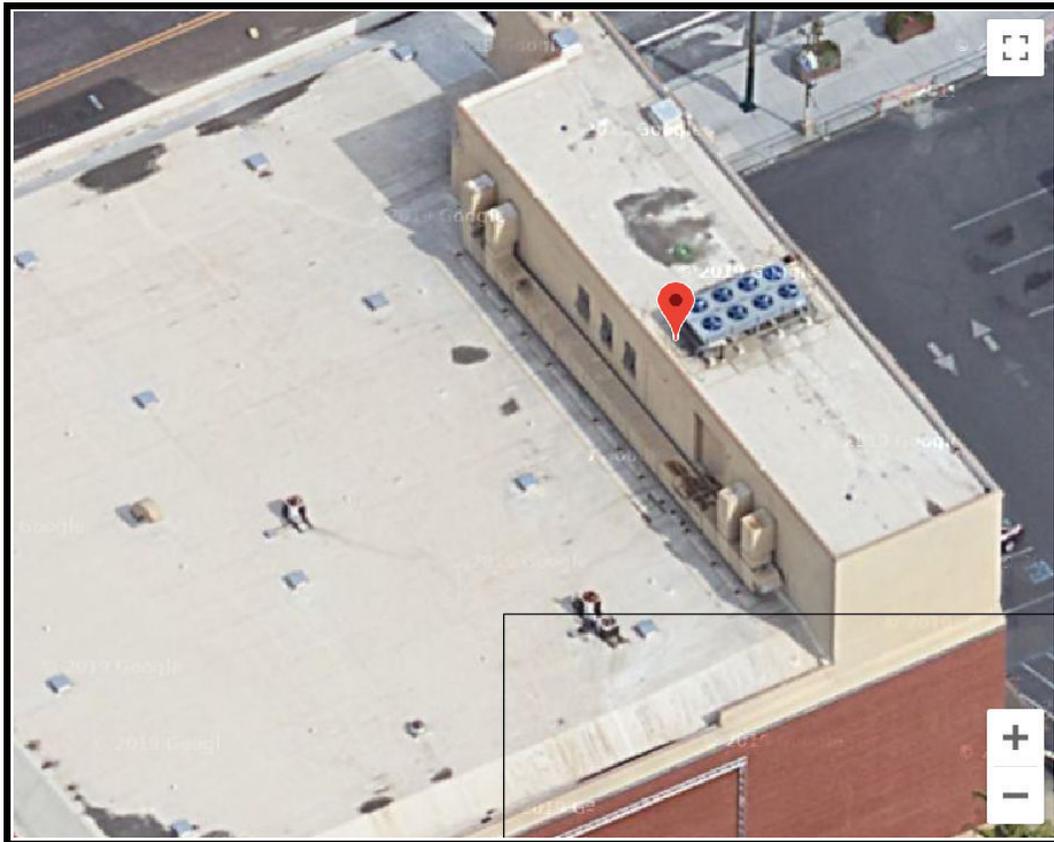


Azi	Field	dBk	kW	Azi	Field	dBk	kW
000	0.775	-17.300	0.019	180	0.022	-48.238	0.000
010	0.880	-16.197	0.024	190	0.015	-51.565	0.000
020	0.953	-15.505	0.028	200	0.007	-58.184	0.000
030	0.991	-15.165	0.030	210	0.002	-69.066	0.000
040	0.985	-15.218	0.030	220	0.002	-69.066	0.000
050	0.941	-15.615	0.027	230	0.008	-57.025	0.000
060	0.861	-16.386	0.023	240	0.017	-50.477	0.000
070	0.750	-17.585	0.017	250	0.023	-47.852	0.000
080	0.608	-19.408	0.011	260	0.022	-48.238	0.000
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120	0.027	-46.459	0.000	300	0.021	-48.642	0.000
130	0.020	-49.066	0.000	310	0.035	-44.205	0.000
140	0.018	-49.981	0.000	320	0.115	-33.872	0.000
150	0.018	-49.981	0.000	330	0.279	-26.174	0.002
160	0.018	-49.981	0.000	340	0.470	-21.644	0.007
170	0.022	-48.238	0.000	350	0.639	-18.976	0.013

## **Second Adjacent Exhibit & Waiver Request**

Per the attached calculations using FCC 30 Meter Terrain, signal strength at proposed site for KSJO is calculated to 91.85 dBuV/m. With additional 40 dBu, KSJO is protected to 131.85 dBu, producing a worst case interference radius of 9.8 meters at the center of radiation. When also factoring depression angles below the antenna, the interfering signal contour is further reduced.

Radiation center extends 4.5 meters over AC unit housing structure. Any residual interference will remain sufficiently contained above the upper most occupied floor of the building by more than 3 meters. No population will be subject to interference from the proposed station according to the undesired-to-desired (U/D) ratio method.



Export of calculations: KSJO signal calculations at reference point

Primary Terrain: **FCC 30 Meter Terrain**  
Secondary Terrain: GLOBE 30 Second World Database  
Coordinate System: NAD83 / WGS84

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Point Information Report

Latitude: 37-19-53.20 N  
Longitude: 121-53-11.20 W

Signal Strength: 91.85 dBuV/m  
Elevation: 31.0 m

Distance From Transmitter: 16.808 km  
Azimuth From Transmitter: 324.09 degrees

Call Letters: KSJO  
File Number: BLH20080214ABH  
Latitude: 37-12-31.80 N  
Longitude: 121-46-30.80 W  
ERP: 32.00 kW  
Channel: 222  
Frequency: 92.3 MHz  
AMSL Height: 394.0 m  
Elevation: 345.0 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No

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Study Information:

D/U Ratio Study

Signal Resolution: 0.1 km  
Study Date: 1/13/2021

Land Cover was not considered in this study.

Primary Terrain: FCC 30 Meter Terrain  
Secondary Terrain: GLOBE 30 Second World Database  
Coordinate System: NAD83/WGS84

Transmitters:

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Transmitter Information:

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Transmitter Information:

Call Letters: KCXU-LP  
File Number: BSTA20200709AAB  
Latitude: 37-19-53.20 N  
Longitude: 121-53-11.20 W  
ERP: 0.030 kW  
Channel: 224  
Frequency: 92.7 MHz  
AMSL Height: 56.6 m  
Elevation: 28.14 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No  
Propagation Model: Longley-Rice  
Climate: Continental temperate  
Conductivity: 0.0050  
Dielectric Constant: 15.0  
Refractivity: 311.0  
Receiver Height AG: 9.1 m  
Receiver Gain: 0 dB  
Time Variability: 50.0%  
Situation Variability: 50.0%  
ITM Mode: Broadcast

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Transmitter Information:

Call Letters: KSJO  
File Number: BLH20080214ABH  
Latitude: 37-12-31.80 N  
Longitude: 121-46-30.80 W  
ERP: 32.00 kW  
Channel: 222  
Frequency: 92.3 MHz  
AMSL Height: 394.0 m  
Elevation: 345.0 m  
Horiz. Antenna Pattern: Omni  
Vert. Elevation Pattern: No  
Propagation Model: Longley-Rice  
Climate: Continental temperate  
Conductivity: 0.0050  
Dielectric Constant: 15.0  
Refractivity: 311.0  
Receiver Height AG: 9.1 m  
Receiver Gain: 0 dB  
Time Variability: 10.0%  
Situation Variability: 50.0%  
ITM Mode: Broadcast

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## Antenna Height Above Average Terrain Calculations -- Results

### Input Data

Latitude **37° 19' 53.4"** North  
Longitude **121° 53' 7.4"** West (NAD 27)

These coordinates convert to NAD 83 coordinates of  
37° 19' 53.19", North, 121° 53' 11.24" West (NAD 83).

Height of antenna radiation center above mean sea level: **56.6 meters** AMSL

Number of Evenly Spaced Radials = **8**      0° is referenced to True North

### Results

Calculated HAAT = **-51 meters**

Antenna Height Above Average Terrain calculated  
using 1 km GLOBE terrain data

### Individual "Radial HAAT" Values, in meters

0°	19.1 m
45°	-238.0 m
90°	-169.0 m
135°	4.8 m
180°	-48.4 m
225°	-37.1 m
270°	7.0 m
315°	52.0 m

[Print Results?](#)

[New Calculation?](#)

## Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > TOWAIR

[FCC Site Map](#)

### TOWAIR Determination Results

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#### \*\*\* NOTICE \*\*\*

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

#### DETERMINATION Results

**Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.**

#### Your Specifications

##### NAD83 Coordinates

Latitude	37-19-53.2 north
Longitude	121-53-11.2 west

##### Measurements (Meters)

Overall Structure Height (AGL)	29.5
Support Structure Height (AGL)	25
Site Elevation (AMSL)	28.1

##### Structure Type

BPOLE - Building with Pole

# Output from NADCON for station

North American Datum Conversion

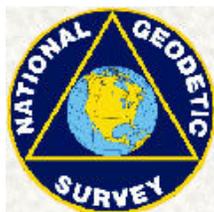
NAD 83 to NAD 27

NADCON Program Version 2.11

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Transformation #: 1                    Region: Conus

	Latitude	Longitude
NAD 27 datum values:	37 19 53.41062	121 53 7.36179
NAD 83 datum values:	37 19 53.20000	121 53 11.20000
NAD 27 - NAD 83 shift values:	0.21062	-3.83821 (secs.)
	6.493	-94.488 (meters)
Magnitude of total shift:		94.711 (meters)



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