<u>KCXU-LP – San Jose, California - Facility ID# 192235</u>
Exhibit for Special Temporary Authority - June 2022
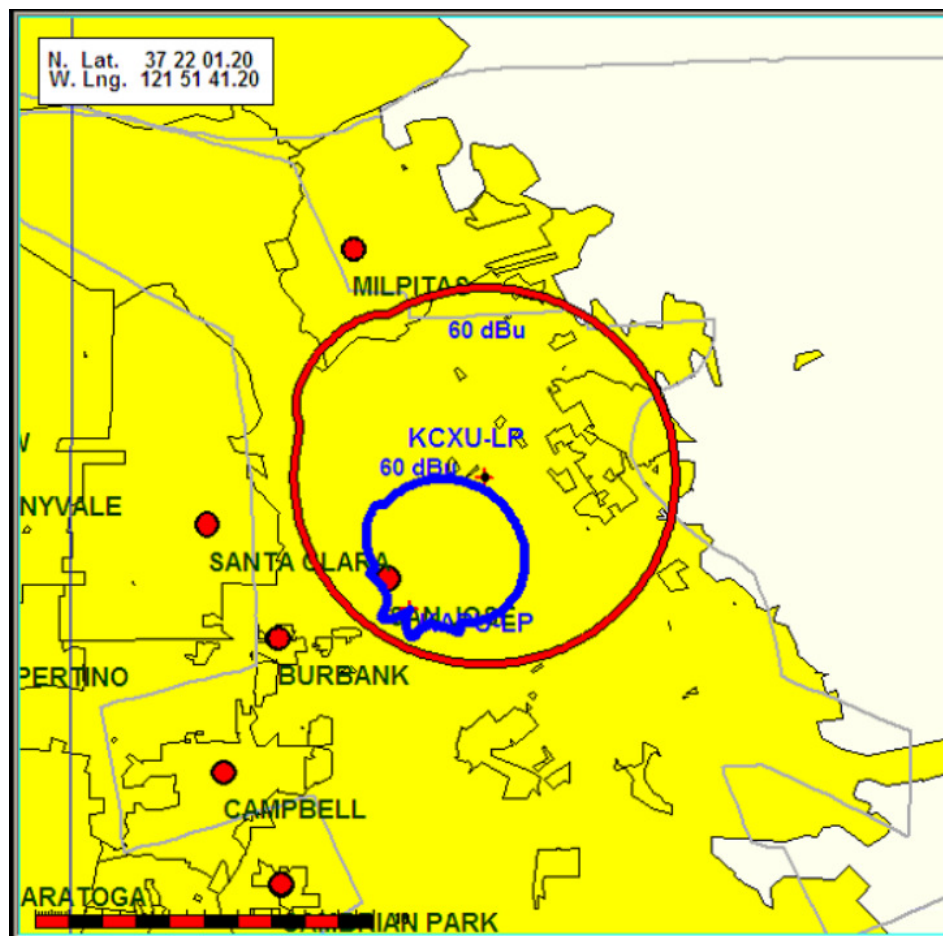
STA Purpose
Antenna structure at new tower site must be modified immediate to withstand windload conditions. Request for temporary authorization with reduced facilities is respectfully submitted. Public interest will be served by allowing for continued operation of broadcast services pending modification.
A standard six-month STA is sought to allow for assessment and completion of modification.

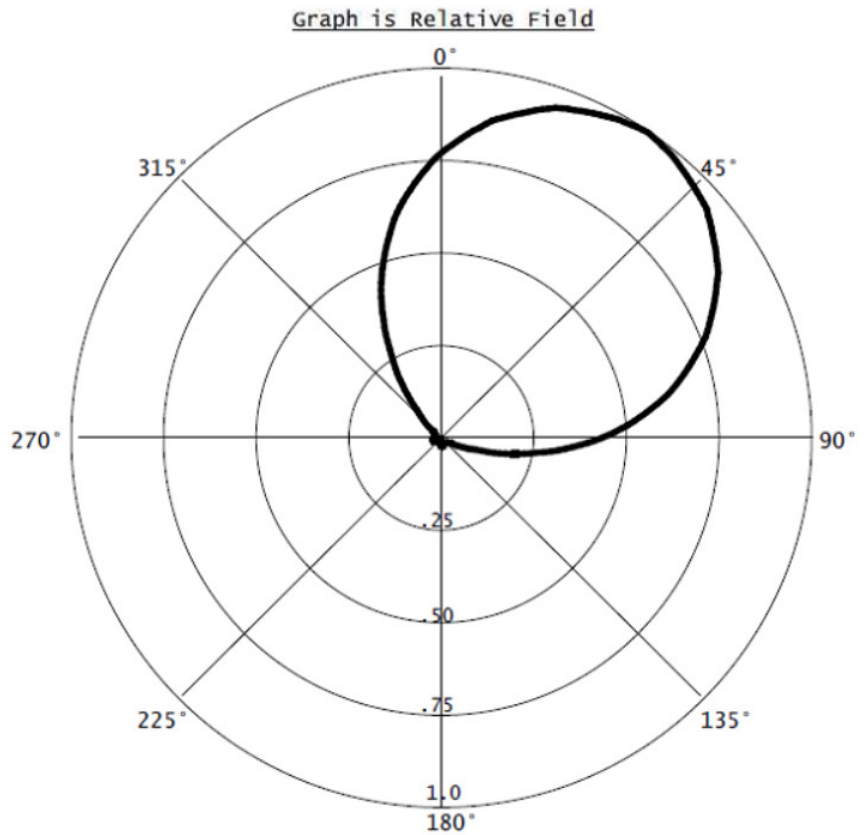Parameters for identical temp facility was previously authorized in January 2021(**BSTA-20210115AAI**).

Description of STA Facility
With a directional SCA CA2 antenna at 30 watts ERP, the 60 dBu contour of STA facility is contained within main 60 dBu contour.   Height of antenna structure will not extend more than 12' feet over the AC unit housing structure on the roof. Short structures on existing buildings are generally excluded from AM proximity analysis. Calculations demonstrating compliance with 47 CFR § 1.30002 are attached below, along with Field values for proposed antenna.

Temp operations under Eng <u>BSTA-20210115AAI</u> produced no interference to surrounding stations. 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.

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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
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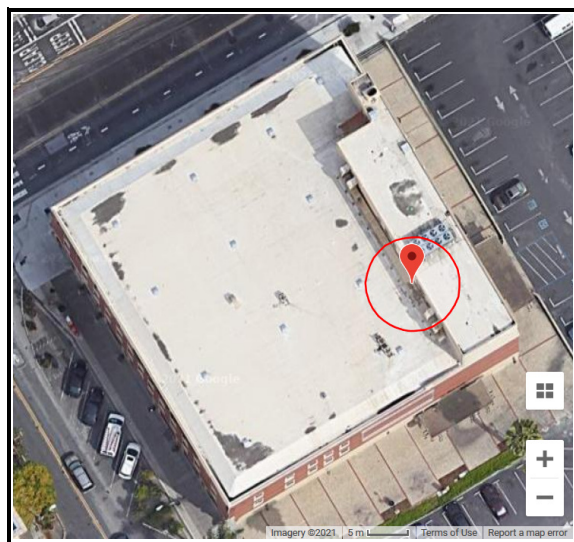

Graph is Relative Field

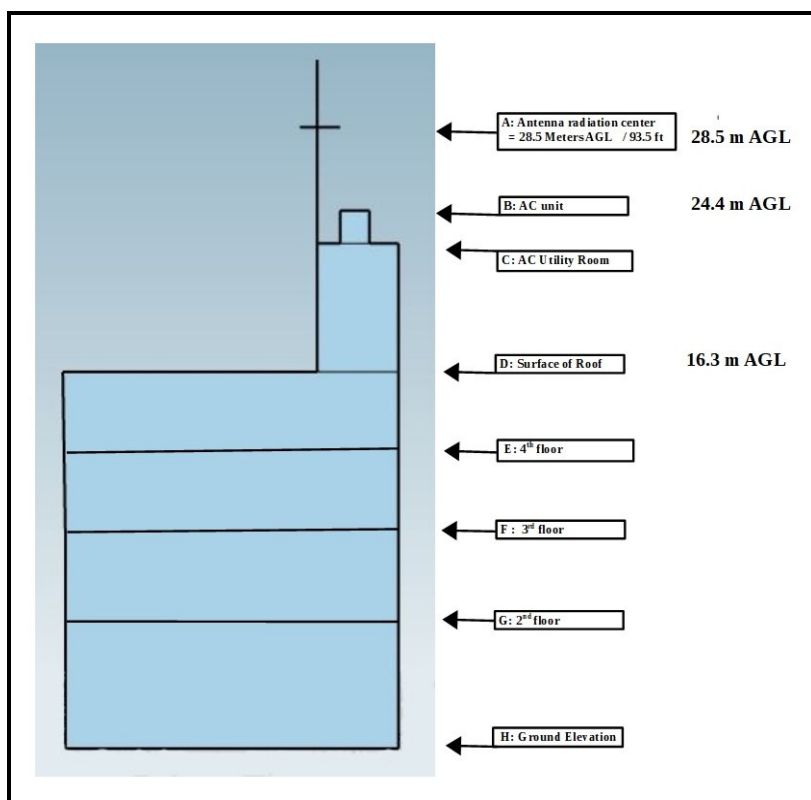| Azi	Field	dBk	kW	Azi	Field	dBk	kW
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060	0.861	-16.386	0.023	240	0.017	-50.477	0.000
070	0.750	-17.585	0.017	250	0.023	-47.852	0.000
080	0.608	-19.408	0.011	260	0.022	-48.238	0.000
090	0.434	-22.337	0.006	270	0.018	-49.981	0.000
100	0.244	-27.339	0.002	280	0.018	-49.981	0.000
110	0.092	-35.811	0.000	290	0.018	-49.981	0.000
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 91.39 dBuV/m. With additional 40 dBu, KSJO is protected to 139.39 dBu, producing a worst case interference radius of 10.4 meters at the center of radiation. When also factoring depression angles below the antenna, the interfering signal contour be further reduced.

With the radiation center 35 feet above the surface of the roof, extended no more than 12' feet over AC unit housing structure, any residual interference signal will remain sufficiently contained above the upper most occupied floor of the building by more than 2 meters. No population will be subject to interference from the proposed station according to the undesired-to-desired ratio method.

Antenna with U/D interference radius

Antenna and building elevations

<u>KSJO signal calculations at reference point</u>

Point Information Report

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

Signal Strength: 91.8 dBuV/m
Elevation: 30.0 m

Distance From Transmitter: 16.807 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: 7/8/2020

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:

Transmitter Information:

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Transmitter Information:

Call Letters: KCXU-LP
File Number: BLL20190711AAW
Latitude: 37-19-53.20 N
Longitude: 121-53-11.20 W
ERP: 0.10 kW
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 53.34 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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Azi Field dBk kW

Azi	Field	dBk	kW
000	0.775	-17.300	0.019
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350	0.639	-18.976	0.013

Supplemental exhibit - Compliance with 47 CFR § 1.30002

Calculations are provided in respect to AM facilities KVVN 1430 AM and KLIV 1590 AM
(per 47 CFR § 1.30000, MM Docket No. 93-177, & FCC 13-115A1).

Proponent structure in relation to **KVVN 1430 AM**, Facility ID#: 28438:

- At height of 5.00 meters, structure on building calculates to 8.58 electrical degrees to KVVN AM.
With KVVN AM tower distanced at 1.7 km and 21m AGL, height and location of proposed structure falls
considerably short of 36 electrical degrees from KVVN, which is excluded from 47 CFR 1.30002.

Calculations per § 1.30001 for proposed facility in respect to KVVN AM 1430 kHz are as follows:

- Whereas wavelength of an AM frequency at 1000 kHz, or 1 MHz = 300 meters,
  KVVN 1430 kHz wavelength is 209.79 meters. (Calculation: 300 m / 1.43 MHz = 209.79 m.)

- Height of proposed structure at 5 meters calculates at 8.58 electrical degrees to KVVN AM:
  [(Structure height in m) / (AM wavelength in m)] x 360 degrees = Height of structure in electrical degrees

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Proponent structure in relation to **KLIV 1590 AM**, Facility ID#: 19531:

- At height of 5.00 meters, structure on building calculates to 9.54 electrical degrees to KLIV AM.
With KLIV AM tower distanced at 2.5 km and 18.9 m AGL, height and location of proposed structure falls
considerably short of 36 electrical degrees from KLIV, which is excluded from 47 CFR 1.30002.

Calculations per § 1.30001 for proposed facility in respect to KLIV 1590 kHz are as follows:

- Whereas wavelength of an AM frequency at 1000 kHz, or 1 MHz = 300 meters,
  KLIV 1590 kHz wavelength is 188.68 meters. (Calculation: 300 m / 1.59 MHz = 188.68 m.)

- Height of proposed structure at 5 meters calculates at 9.54 electrical degrees to KLIV AM:
  [(Structure height in m) / (AM wavelength in m)] x 360 degrees = Height of structure in electrical degrees

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As demonstrated by the calculations and factors provided above, height and location for proposed
structures is eligible to be excluded from further requirements under 47 CFR 1.30002.

Antenna structure and building elevations

A: Antenna radiation center
= 28.5 Meters AGL / 93.5 ft   **28.5 m AGL**

B: AC unit   **24.4 m AGL**

C: AC Utility Room

D: Surface of Roof   **16.3 m AGL**

E: 4th floor

F : 3rd floor

G: 2nd floor

H: Ground Elevation