

KSGG(FM) 284A King City, CA to Soledad, CA Modification

This technical report has been developed in support of an application for KSGG(FM) 284A at King City, CA, FCC facility I.D. 762378. Changes in the tower site, COR, antenna and ERP are submitted with a corresponding change in city of license to Soledad, CA.

The following exhibits are provided for the form 301 application:

- E-1 284A Spacing Study
- E-2 HAAT
- E-3 70 dBu Contour, 16.2 km Radius Circle Coverage Plot
- E-4 RF Calculation
- E-5 ASR 1053794

Allocation Analysis:

A channel study is included as E-1 and shows the KSGG(FM) 284A modification is fully-spaced at its new site, ASR #1053794, at coordinates:

36-22-58.8 N 121-25-43.9 NAD 83.

The modified 284A facility will use an ERI LPX single bay, nondirectional antenna mounted at 24.4 meters COR AGL, 964.7 meters COR AMSL, 488.3 meters HAAT (exhibit E-2) and operate at 0.24 kW ERP. The 488.3 meters HAAT exceeds 100 meters, therefore the ERP has been adjusted to 0.24 kW to produce a reference 60 dBu of 28.3 km which rounds to 28. The application site is fully spaced and also serves as the reference point providing a 16.2 km circular 70 dBu over Soledad, CA community of license (exhibit E-3).

RF Exposure Calculation:

The RF contribution was calculated using FMModel (exhibit E-4). The resulting RF is calculated to be $7.1 \mu\text{W}/\text{cm}^2$ at a distance of 22.4 meters from the base of the tower, which is below 5% of the $200 \mu\text{W}/\text{cm}^2$ maximum permissible for general public exposure, allowing its exclusion from consideration.

Conclusion:

It is concluded that the long form application to the NEW 275A to 284A complies with all Commission rules and policies.



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E-1 KSGG(FM) 284A Spacing Study

REFERENCE
 36 22 58.80 N.
 121 25 43.90 W.

CLASS = A
 Current Spacings to 3rd Adj.

Channel 284 - 104.7 MHz

DISPLAY DATES
 DATA 04-13-22
 SEARCH 04-13-22

| Call | Channel | Location | Azi | Dist | FCC | Margin |
|----------|------------|---------------|----------|--------|-------|------------------|
| AL9203_% | RSV-A 284A | King City | CA 131.5 | 21.19 | 114.5 | -93.3 |
| KSGG | LIC-N 284A | King City | CA 126.9 | 32.57 | 114.5 | -81.9 (1) |
| KHTN | LIC-Z 284B | Planada | CA 43.7 | 178.30 | 177.5 | 0.8 |
| KHIP | LIC-N 282A | Gonzales | CA 345.6 | 32.69 | 30.5 | 2.2 |
| KOCN | LIC 286A | Pacific Grove | CA 300.4 | 37.36 | 30.5 | 6.9 |
| KEXA | LIC 230B1 | King City | CA 91.0 | 19.02 | 11.5 | 7.5 |
| KSTT-FM | LIC 283B | Atascadero | CA 148.3 | 133.10 | 112.5 | 20.6 |
| KXSC | LIC 285A | Sunnyvale | CA 344.6 | 108.26 | 71.5 | 36.8 |

RSV-R = reserved - needs protection, RSV-A = allocation
 % = Station Fails minimum 73.215 spacings
 All separation margins include rounding

(1) The KSGG(FM) 284A modification from King City, CA to Soledad, CA is fully-spaced.

E-2 KSGG(FM) 284A Mod. HAAT

N. Lat. = 362258.8 W. Lng. = 1212543.9
HAAT and Distance to Contour,
3-16 km, 51 pts Method - GLOBE 30 SEC

KSGG, Dimes Media Corporation, 0000186666

Azi. AV EL HAAT ERP kW 60-F(50-50)

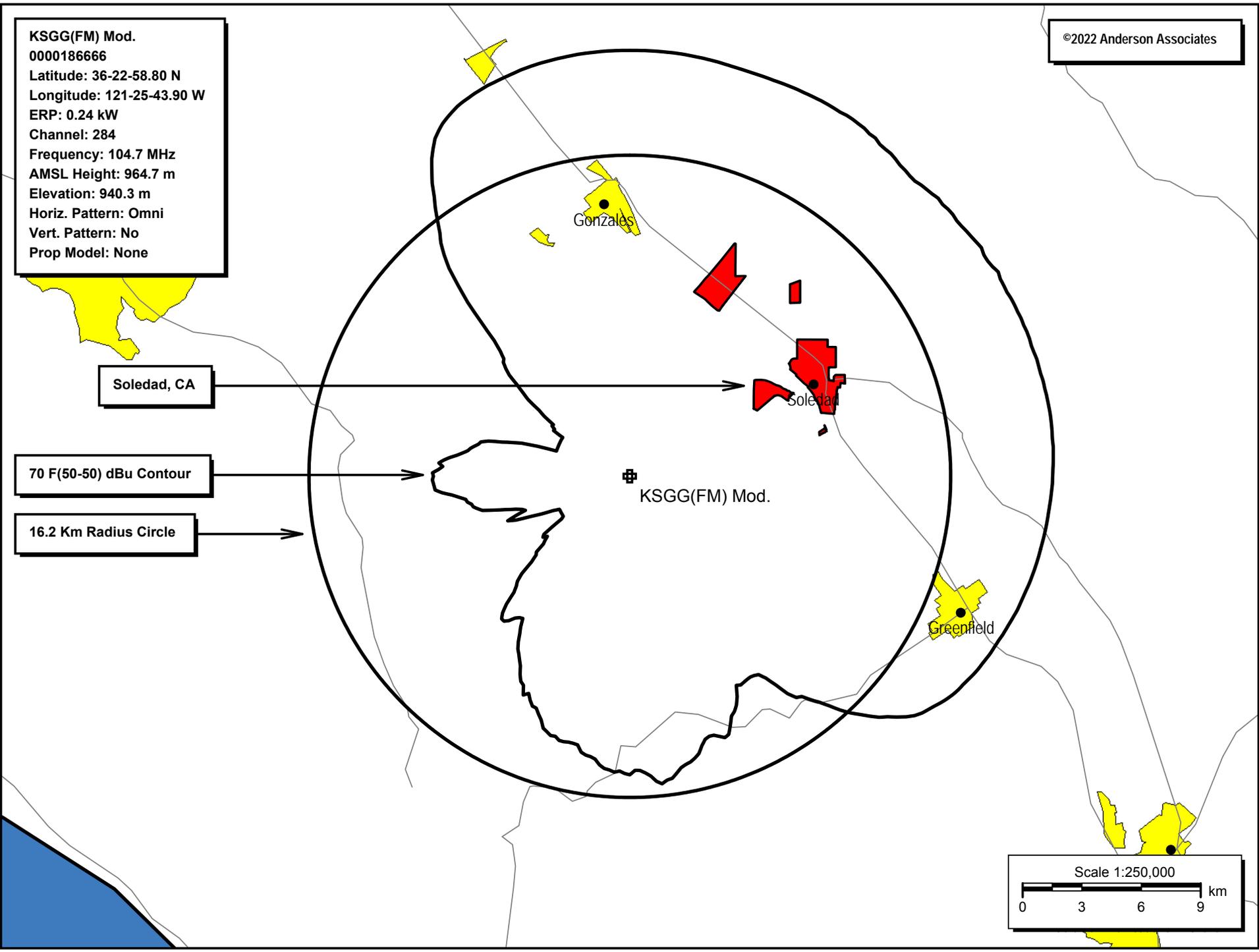
| | | | | |
|-----|-------|-------|--------|-------|
| 000 | 80.8 | 883.9 | 0.2400 | 39.72 |
| 036 | 116.5 | 848.2 | 0.2400 | 38.88 |
| 072 | 096.5 | 868.2 | 0.2400 | 39.36 |
| 108 | 160.5 | 804.2 | 0.2400 | 37.76 |
| 144 | 668.9 | 295.8 | 0.2400 | 22.19 |
| 180 | 571.3 | 393.4 | 0.2400 | 25.39 |
| 216 | 819.8 | 144.9 | 0.2400 | 15.39 |
| 252 | 895.2 | 069.5 | 0.2400 | 10.75 |
| 288 | 910.4 | 054.3 | 0.2400 | 09.59 |
| 324 | 443.6 | 521.1 | 0.2400 | 29.42 |

Ave El= 476.37 M HAAT= 488.33 M AMSL= 964.7 M

E-3 KSGG(FM) 284A Mod. 70 dBu Contour Plot

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KSGG(FM) Mod.
0000186666
Latitude: 36-22-58.80 N
Longitude: 121-25-43.90 W
ERP: 0.24 kW
Channel: 284
Frequency: 104.7 MHz
AMSL Height: 964.7 m
Elevation: 940.3 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None



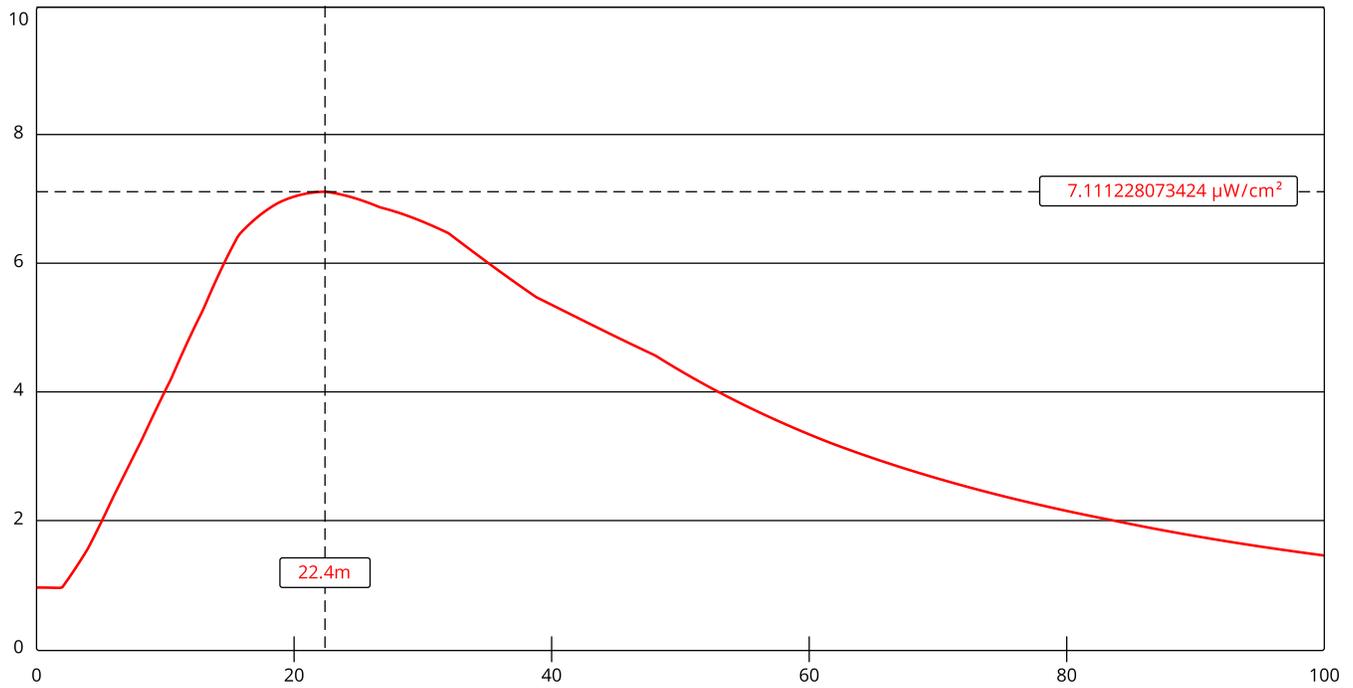
Soledad, CA

70 F(50-50) dBu Contour

16.2 Km Radius Circle

Scale 1:250,000
0 3 6 9 km

E-4 KSGG(FM) 284A RF Calculation



| | | | |
|--------------------------------|-----------------------------------|---------------------|----------------------------------|
| Channel Selection | Channel 284 (104.7 MHz) ▾ | | |
| Antenna Type + | EPA Type 3: Opposed U Dipole ▾ | | |
| Height (m) | <input type="text" value="24.4"/> | Distance (m) | <input type="text" value="100"/> |
| ERP-H (W) | <input type="text" value="240"/> | ERP-V (W) | <input type="text" value="240"/> |
| Num of Elements | <input type="text" value="1"/> | Element Spacing (?) | <input type="text" value="1"/> |
| Num of Points | <input type="text" value="500"/> | | |

ASR Registration 1053794

Registration Detail

| | | | |
|-------------|----------|-------------|-------------|
| Reg Number | 1053794 | Status | Constructed |
| File Number | A0816810 | Constructed | 08/06/2001 |
| EMI | No | Dismantled | |
| NEPA | No | | |

Antenna Structure

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

Location (in NAD83 Coordinates)

| | | | |
|--------------------|----------------------------|----------------------------|--|
| Lat/Long | 36-22-58.8 N 121-25-43.9 W | Address | 37390 River Lane (Soledad Peak T1 #8505) |
| City, State | SOLEDAD , CA | | |
| Zip | 93960 | County | MONTEREY |
| Center of AM Array | | Position of Tower in Array | |

Heights (meters)

| | | | |
|--|-------|---|------|
| Elevation of Site Above Mean Sea Level | 940.3 | Overall Height Above Ground (AGL) | 33.5 |
| Overall Height Above Mean Sea Level | 973.8 | Overall Height Above Ground w/o Appurtenances | 30.5 |

Painting and Lighting Specifications

None

FAA Notification

| | | | |
|-----------|-----------------|----------------|------------|
| FAA Study | 2005-AWP-663-OE | FAA Issue Date | 02/09/2005 |
|-----------|-----------------|----------------|------------|

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

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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 | | |

Related Applications

01/15/2013 A0816810 - Change Owner (OC)