

**Goldman Engineering Management
Auburn, CA**

KRAT-FM2 Carson City, NV

NARRATIVE DESCRIPTION OF REQUEST FOR MINOR LICENSE MODIFICATION

By this application, The Evans Broadcast Company, Inc, licensee of KRAT (FM), 221C3, Sparks, Nevada (Facility ID 13528) and KRAT-FM2 (FM) Channel 221D, Carson City, NV (Facility ID 199465) respectfully requests a Construction Permit to relocate the currently licensed KRAT-FM2 booster 1.8km west along the same mountain ridge to a different tower site..

FACILITIES REQUESTED

The requested facility will operate within the 60dBu contour of KRAT (FM). A map showing the coverage of this booster in relationship to the KRAT primary signal is shown in Exhibit A. The antenna being used will be a Kathrein/ Scala CLFM-V, single element, log-periodic antenna. The maximum lobe of the antenna will be oriented at 135 degrees True. The antenna elements are rotated 45 degrees from vertical to achieve slant H+V polarization. The Azimuth Pattern is attached as Exhibit C.

| | |
|---------------------------------|--|
| Booster Location: | Carson City, NV |
| ASR | N/A, on 18m pole next to ASR 1282424 (24m) |
| Geographic Coordinates (NAD83): | 39°12' 59.5" N, 119° 47' 31" W |
| Channel: | 221 (91.9 MHz) |
| Effective Radiated Power: | 50W (V), 50w (H) |
| Antenna Type, Pattern: | CLFM-V (45 slant), log-periodic |
| Antenna Orientation: | 135° True |
| Site Height AMSL | 1688m |
| Tower height | 18.m |
| Antenna Height : | |
| Above ground: | 17 m |
| Above mean sea level: | 1688 m |

ALLOCATION

As shown in the allocation chart below, KRAT-FM2 will be fully compliant with all rules:

ComStudy 2.2 search of channel 221 (92.1 MHz Class A) at 39-12-59.0 N, 119-47-31.0 W.

| CALL | CITY | ST CHN CL | DIST | SEP | BRNG | CLEARANCE |
|--------|----------------------|-----------|--------|--------|-------|---------------------------|
| KRAT | SPARKS | NV 221 C3 | 40.83 | 142.00 | 358.7 | -21.99 dB Primary Station |
| KWYL | SOUTH LAKE TAHOE | CA 275 C | 13.16 | 29.00 | 322.7 | -15.8 IF SHORT (99w lim) |
| K220CO | SOUTH LAKE TAHOE, ET | CA 220 D | 40.01 | 0.00 | 211.8 | 2.64 dB |
| K219AR | VERDI | NV 219 D | 42.02 | 0.00 | 342.5 | 4.55 dB |
| KSVL | SMITH | NV 222 C3 | 79.03 | 89.00 | 138.2 | 6.85 dB |
| K223AL | RENO | NV 223 D | 40.79 | 0.00 | 359.1 | 11.50 dB |
| K220BC | YERINGTON, ETC. | NV 220 D | 53.78 | 0.00 | 118.1 | 18.58 dB |
| K221AR | HAWTHORNE | NV 221 D | 122.67 | 0.00 | 133.0 | 26.64 dB |
| KBEB | SACRAMENTO | CA 223 B | 156.60 | 69.00 | 249.3 | 28.75 dB |
| K220DB | SUSANVILLE, ETC. | CA 220 D | 144.92 | 0.00 | 340.7 | 31.56 dB |

As shown in Exhibit A the 60dBu contour of the booster will fall inside the 60dBu contour of KRAT (FM), Channel 221C3. As shown in the study above, there is no impact by the proposed booster to any co-channel or first adjacent facility other than the KRAT (FM) Primary station. The booster is short spaced as a class A facility to KWYL (275C) and is therefore limited to no more than 99 watts. Since the instant proposal is for 50 watts, the proposed KRAT-FM2 booster will be compliant with respect to IF protection. The first adjacent 54dBu f50,10 contours of the main and booster are shown in Exhibit B.

ENVIRONMENTAL CONSIDERATIONS

The Booster antenna will be attached at 17 meters AGL on a wooden telephone pole which will be located directly adjacent (within 50ft) of a taller registered tower (ASR 1282424, 24m AGL). Because the pole will be located in the “shadow” of ASR 1282424, no registration is required. Based upon the preceding, the proposed antenna is believed to be exempt from environmental processing under CFR Section 1.1306.

Using the FCC program “FM Model”, using the EPA type 1 setting, the predicted RF power density at 2m above ground with a 17m center of radiation is $8.9\mu\text{W}/\text{cm}^2$ which is 4.5% of the maximum allowable public exposure (MPE) of $200\mu\text{W}/\text{cm}^2$. Further as a facility operating below 5% of the MPE, the proposed booster is considered an excluded facility for purposes of RFR compliance and may be considered separately from any other nearby source of RF.

The permittee 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

Proposed KRAT Booster (50w)

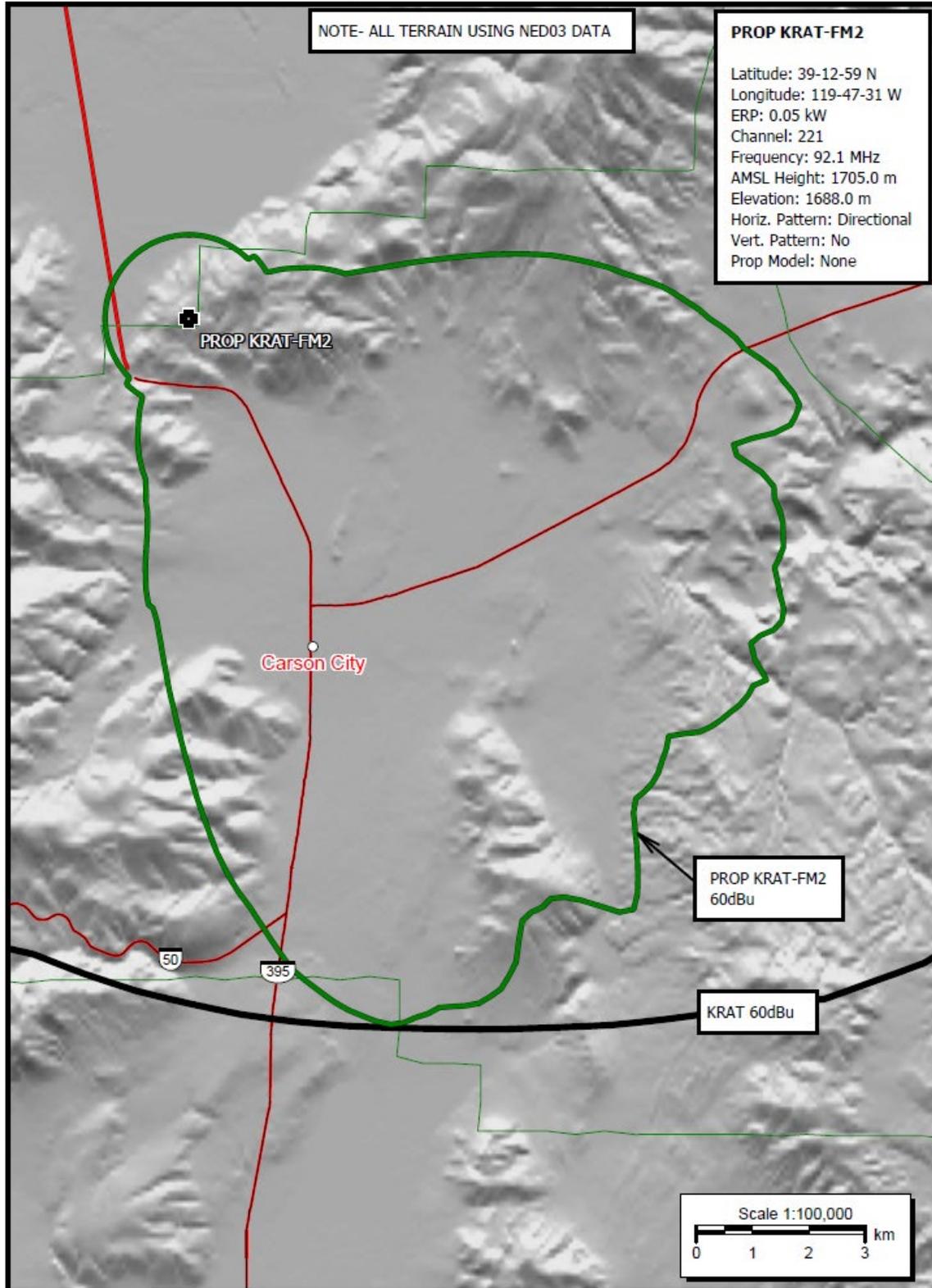


EXHIBIT B- First Adjacent Interfering Contours

Proposed KRAT Booster (50w)- First Adjacent Compliance

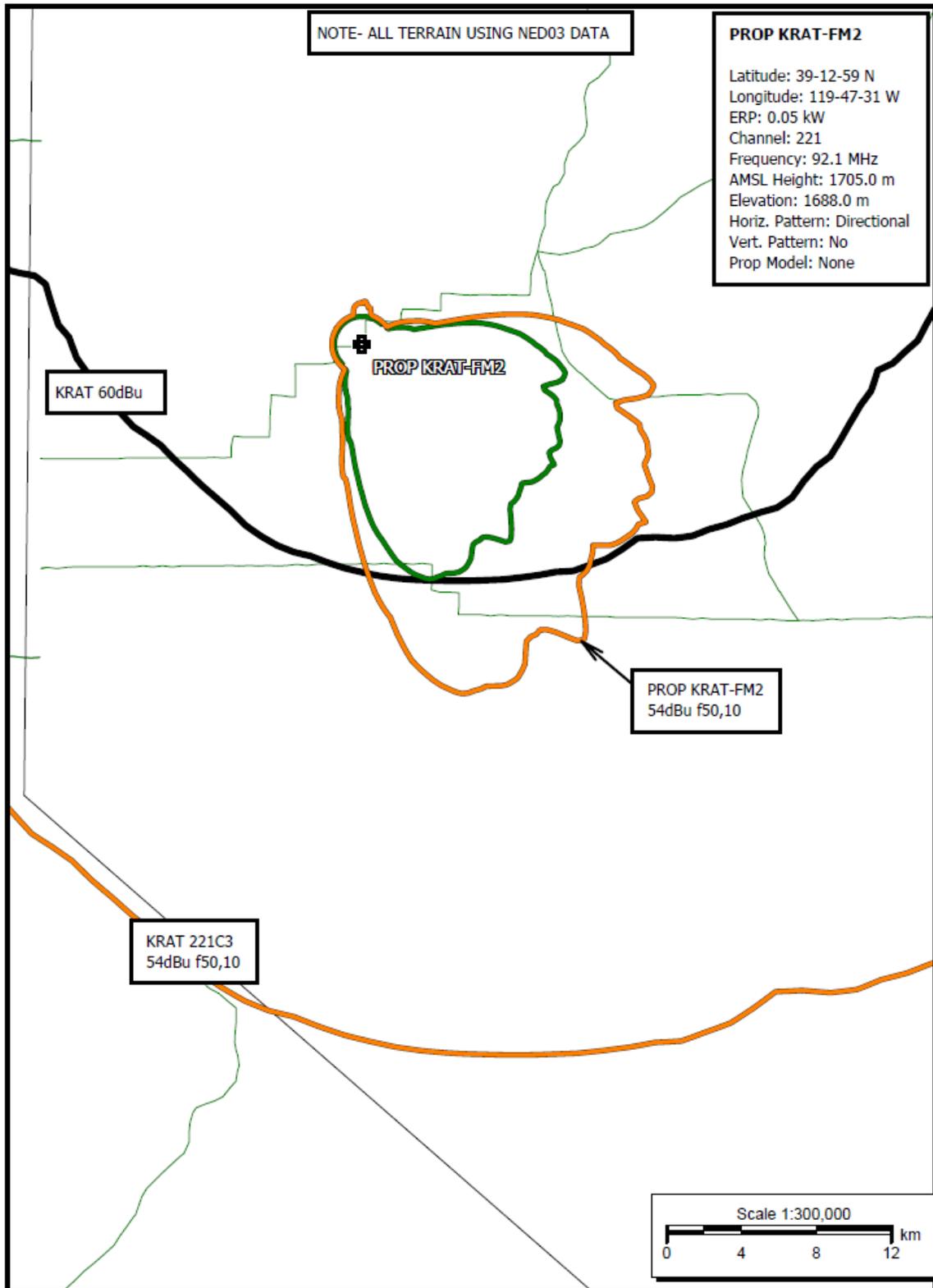
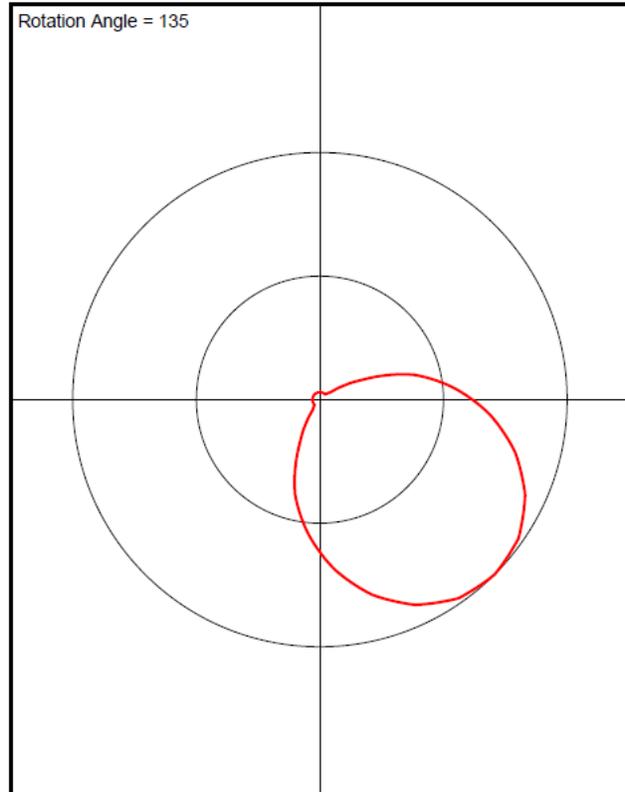


EXHIBIT C- Proposed Antenna Pattern (135deg= 1.0)

PROP KRAT-FM2 Antenna Pattern
 Post-Rotation Antenna Pattern....

| Azimuth (deg) | Relative Field |
|---------------|----------------|
| 0.0 | 0.03 |
| 5.0 | 0.03 |
| 10.0 | 0.03 |
| 15.0 | 0.03 |
| 20.0 | 0.03 |
| 25.0 | 0.03 |
| 30.0 | 0.03 |
| 35.0 | 0.03 |
| 40.0 | 0.03 |
| 45.0 | 0.03 |
| 50.0 | 0.04 |
| 55.0 | 0.05 |
| 60.0 | 0.12 |
| 65.0 | 0.19 |
| 70.0 | 0.29 |
| 75.0 | 0.39 |
| 80.0 | 0.467 |
| 85.0 | 0.544 |
| 90.0 | 0.617 |
| 95.0 | 0.69 |
| 100.0 | 0.7535 |
| 105.0 | 0.817 |
| 110.0 | 0.8665 |
| 115.0 | 0.916 |
| 120.0 | 0.948 |
| 125.0 | 0.98 |
| 130.0 | 0.99 |
| 135.0 | 1.0 |
| 140.0 | 0.99 |
| 145.0 | 0.98 |
| 150.0 | 0.948 |
| 155.0 | 0.916 |
| 160.0 | 0.8665 |
| 165.0 | 0.817 |
| 170.0 | 0.7535 |
| 175.0 | 0.69 |
| 180.0 | 0.617 |
| 185.0 | 0.544 |
| 190.0 | 0.467 |
| 195.0 | 0.39 |
| 200.0 | 0.29 |
| 205.0 | 0.19 |
| 210.0 | 0.12 |
| 215.0 | 0.05 |
| 220.0 | 0.04 |
| 225.0 | 0.03 |
| 230.0 | 0.03 |
| 235.0 | 0.03 |
| 240.0 | 0.03 |
| 245.0 | 0.03 |
| 250.0 | 0.03 |
| 255.0 | 0.03 |
| 260.0 | 0.03 |
| 265.0 | 0.03 |
| 270.0 | 0.03 |
| 275.0 | 0.03 |
| 280.0 | 0.03 |
| 285.0 | 0.03 |
| 290.0 | 0.03 |
| 295.0 | 0.03 |
| 300.0 | 0.03 |
| 305.0 | 0.03 |
| 310.0 | 0.03 |
| 315.0 | 0.03 |



| | |
|-------|------|
| 320.0 | 0.03 |
| 325.0 | 0.03 |
| 330.0 | 0.03 |
| 335.0 | 0.03 |
| 340.0 | 0.03 |
| 345.0 | 0.03 |
| 350.0 | 0.03 |
| 355.0 | 0.03 |