

**Goldman Engineering Management  
Auburn, CA**

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KDHT-FM2- Facility ID #162021

APPLICATION FOR MODIFICATION OF CP

This technical statement and attached exhibits have been prepared on behalf of Amaturo Sonoma Media Group, LLC. Licensee of station KDHT (FM), Channel 285B1, Rohnert Park, CA, Facility identifier 55967, and associated booster station KDHT-FM2, Facility ID 162021 for a modification to the FM booster.

FACILITIES REQUESTED

THIS APPLICATION ONLY PROPOSES TO CHANGE THE ANTENNA MODEL. No other changes are proposed. Other than the change in antenna model, only the ground level RFR has been re-evaluated due to the vertical pattern change. The requested facility will continue to operate within the 57dBu contour of KDHT. A map showing the coverage of this booster in relationship to the KDHT signal is shown in Exhibit A. The antenna being used is a Kathrein-Scala CL-FM log-periodic antenna. The Azimuth Pattern is attached as Exhibit B.

Call Letters	KDHT-FM2
Booster Location:	Sonoma, CA
ASR	NONE
Geographic Coordinates (NAD83):	38°20'10" N, 122°32'07" W
Channel:	285 (104.9 MHz)
Effective Radiated Power:	230W
Antenna Type, Pattern:	Scala CL-FM-V (45deg slant)
Antenna Orientation:	115° True (EXHIBIT C)
Site Height AMSL	266m
Tower OAGL	20m
Antenna Height :	
Above ground:	18m
Above mean sea level:	284m

As shown in Exhibit A, the 57dBu contour of the booster will fall inside the 57dBu contour of KDHT and is thus compliant with 74.1232(f). There are no pertinent first adjacent stations near KDHT or the proposed KDHT-FM2. The proposed booster is not short-spaced as a class A facility to any IF related stations. As shown in Exhibit B, there are no locations where the worst-case (class B) interfering booster contours exceed the respective contours of the KDHT Primary station.

#### ENVIRONMENTAL CONSIDERATIONS

The Booster will be attached at the 18m height on an existing 20m unregistered tower. Because there will be no modifications to this tower it is exempt from environmental processing under CFR Section 1.1306. The existing tower was checked and passes the TOWAIR determination. Those results are attached as Exhibit D.

The proposed KDHT-FM2 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. The RF field was calculated at 36.1μW/cm<sup>2</sup> which is 18% of the allowable MPE. Based upon the above calculation, it is believed that KDHT-FM2 is 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

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

Proposed KDHT Booster - 230 Watts

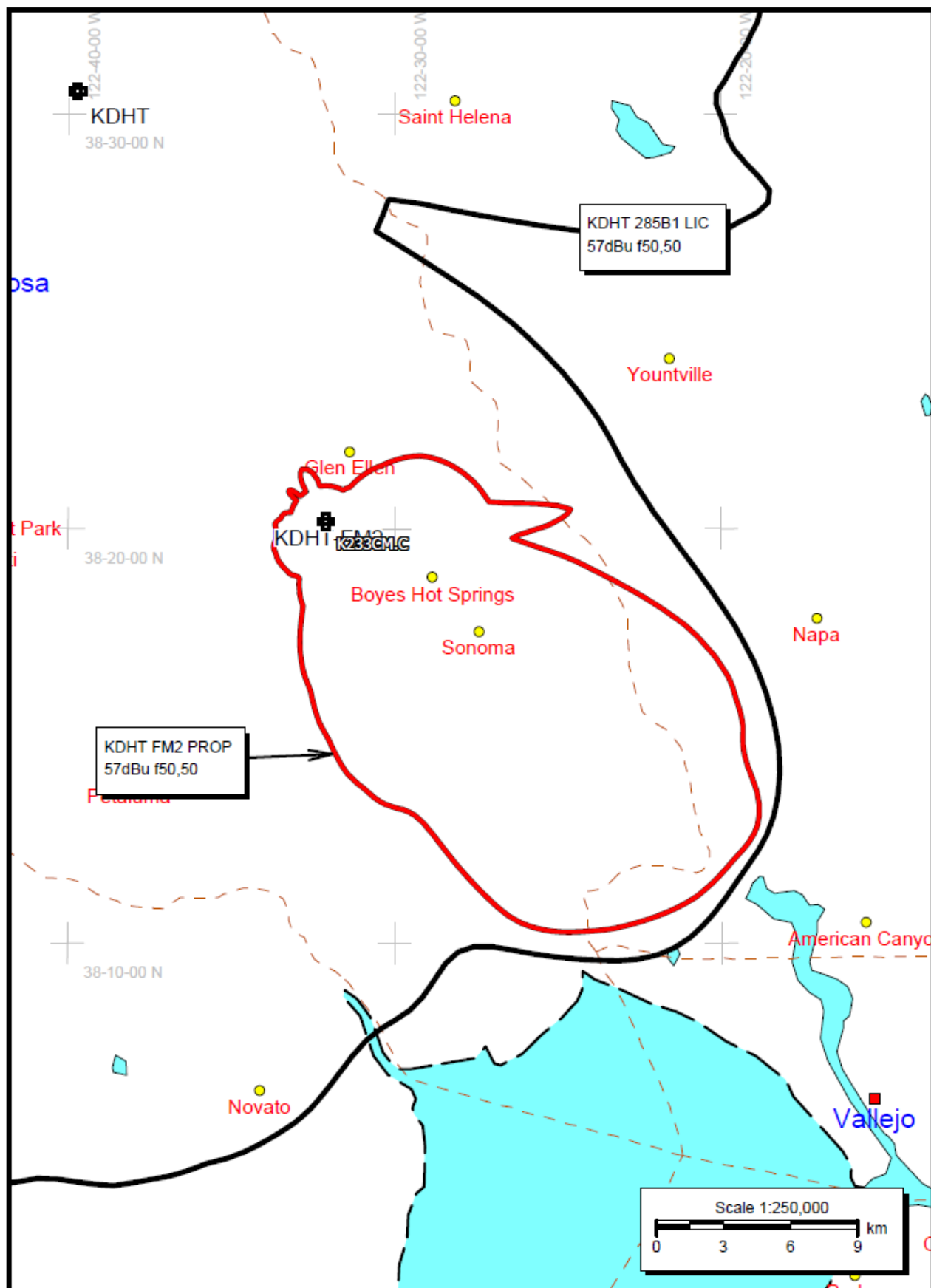
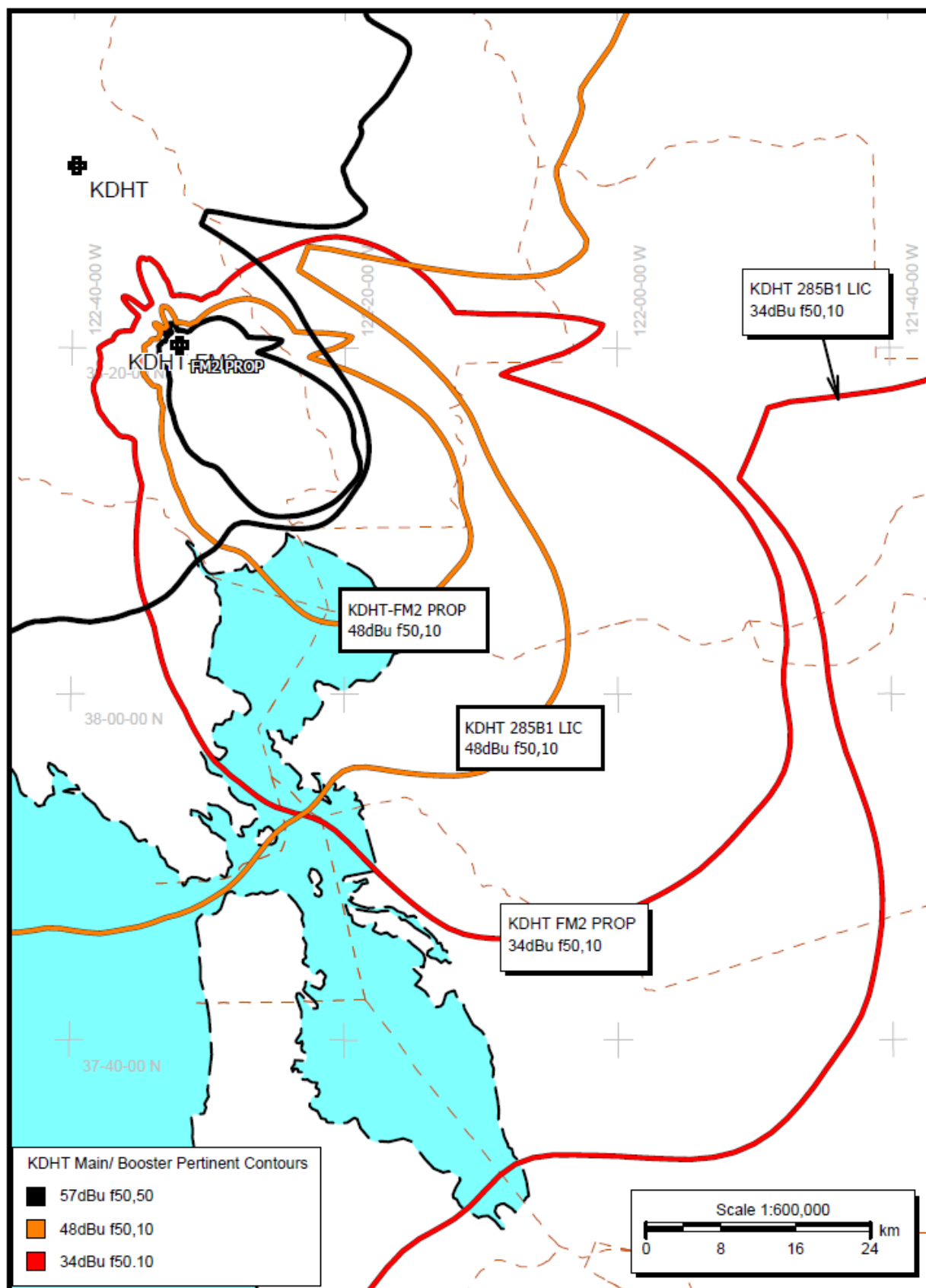


EXHIBIT B- Worst- Case Interfering Contour Exhibit

Proposed KDHT Main/ Booster - 230 Watts Interfering Contours (to Class B)

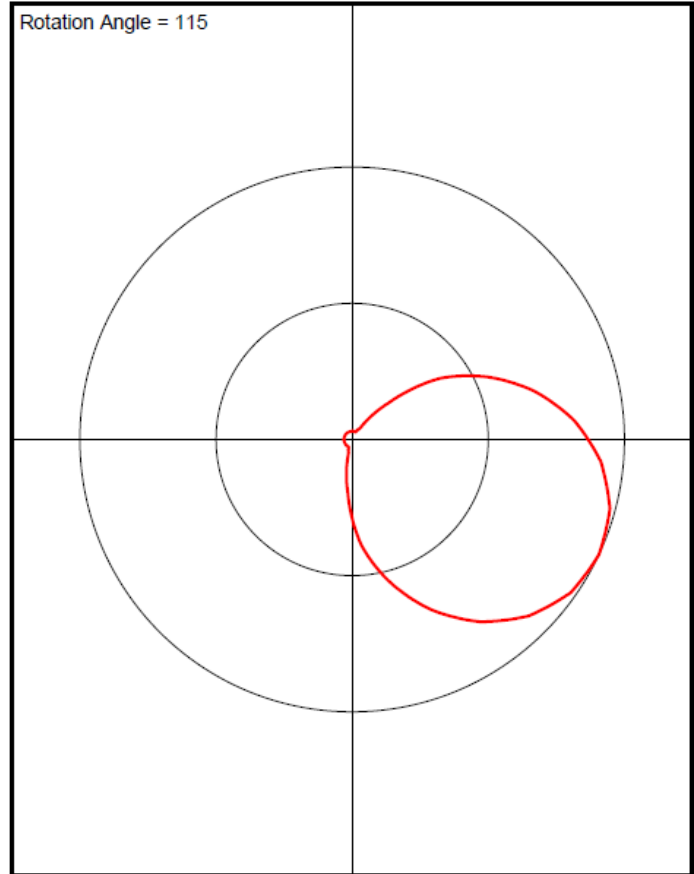


## EXHIBIT C- Antenna Pattern

### KDHT-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	0.04
35.0	0.05
40.0	0.12
45.0	0.19
50.0	0.29
55.0	0.39
60.0	0.467
65.0	0.544
70.0	0.617
75.0	0.69
80.0	0.7535
85.0	0.817
90.0	0.8665
95.0	0.916
100.0	0.948
105.0	0.98
110.0	0.99
115.0	1.0
120.0	0.99
125.0	0.98
130.0	0.948
135.0	0.916
140.0	0.8665
145.0	0.817
150.0	0.7535
155.0	0.69
160.0	0.617
165.0	0.544
170.0	0.467
175.0	0.39
180.0	0.29
185.0	0.19
190.0	0.12
195.0	0.05
200.0	0.04
205.0	0.03
210.0	0.03
215.0	0.03
220.0	0.03
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

## EXHIBIT D- TOWAIR Determination

### TOWAIR Determination Results

#### \*\*\* 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. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.**

#### Your Specifications

##### NAD83 Coordinates

Latitude	38-20-10.0 north
Longitude	122-32-07.0 west

##### Measurements (Meters)

Overall Structure Height (AGL)	19
Support Structure Height (AGL)	1
Site Elevation (AMSL)	266

##### Structure Type

POLE - Any type of Pole

#### Tower Construction Notifications

Notify Tribes and Historic Preservation Officers of your plans to build a tower.