Technical Report
K263BN Minor Modification

This technical report is submitted for a minor modification to K263BN, FCC file no. BLFT-20161123ACT. A move from its current channel 260 to 258 and increase in ERP is submitted. The translator will remain to serve as a fill-in facility to rebroadcast KZST(FM) 261A at Santa Rosa, CA, FCC facility I.D. 55430.

K260XX Modification Analysis:

An overlap study (exhibit E-1) shows the K263BN modification to channel 258 is within its primary third-adjacent KZST(FM) 261A 60 dBu protected contour. The 100 dBu F(50-10) contour (exhibit E-2) does not overlap the Santa Rosa, CA community of license, as allowed by CFR 74.1204(e). The 60 dBu overlaps the current 60 dBu contour and is contained within the primary KZST(FM) 60 dBu contour (exhibit E-3).

Antenna System:

The K263BN modification is located on the existing 32 meter tower at coordinates:

38 29 20N 123 01 53W NAD 27.

A TOWAIR determination (exhibit E-4) shows the tower does not require registration. A Scala CL-FM single bay, horizontally-polarized, directional antenna (exhibit E-5) will be mounted at a COR AGL of 23 meters, 363 meters AMSL and operate at 0.045 kW ERP.

RF Exposure Calculation:

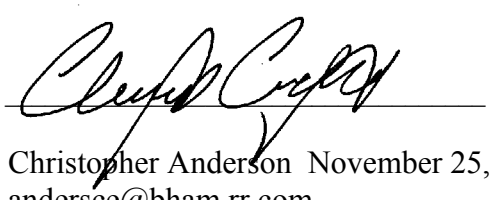
The RF contribution was calculated using the formula from the OET Bulletin 65:

$$S\ (\text{RF in microwatts/cm}^2) = \frac{33.4 \times F^2 \times (\text{H ERP} + \text{V ERP in watts})}{R^2\ (\text{height of radiation center in meters} - 2\text{m})}$$

Using a worst case vertical (F) factor of 1.0, the RF is calculated to be 3.41 μW/cm^2 to the ground, which is well below 5% of the 200 μW/cm^2 maximum permissible for general public exposure, allowing exclusion from consideration.

Conclusion:

It is concluded that the K263BN modification complies with all Commission rules and policies.



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E-1 K263BN.CP (260) Mod. to Ch. 258 Overlap Study

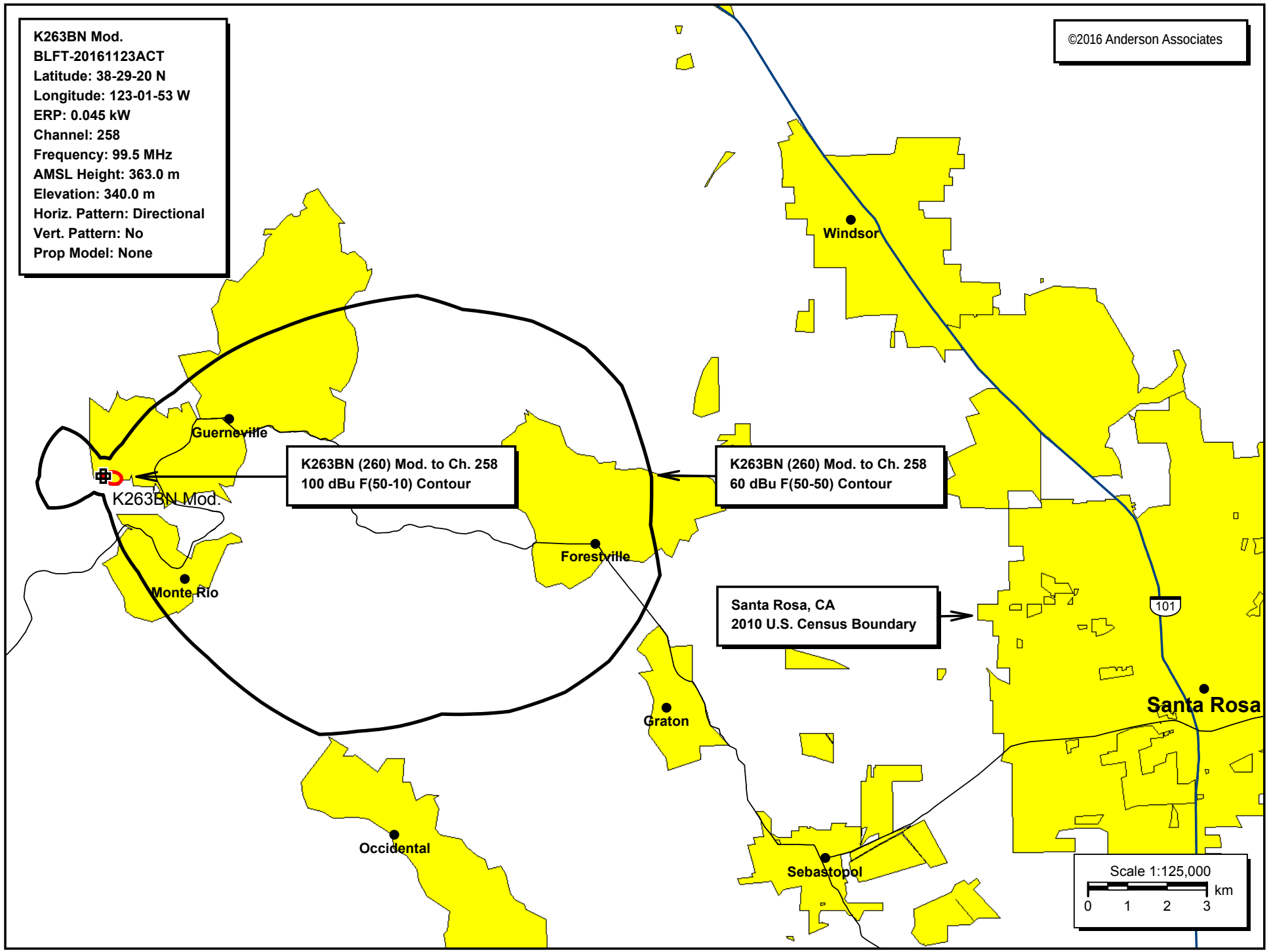
REFERENCE CH# 258D - 99.5 MHz, Pwr= 0.045 kW DA, HAAT= 193.0 M, COR= 363 M DISPLAY DATES
38 29 20.0 N. Average Protected F(50-50)= 11.79 km DATA 11-21-16
123 01 53.0 W. Standard Directional SEARCH 11-25-16

CH CITY	CALL STATE	TYPE ANT <--	AZI DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
258B Lakeport	KNTI CA	LIC _CN	356.9 176.9	71.44 BLH19850711KV	39 07 50.0 123 04 32.0	2.400 585	112.3 1116	56.8 Bicoastal Media Licenses,	-42.2*	3.7
261A Santa Rosa	KZST CA	LIC _C_	104.1 284.3	31.92 BLH19991015ABU	38 25 07.0 122 40 33.0	6.000 75	3.8 255	40.6 Redwood Empire Stereocaste	13.9	-9.2*(1)
259B San Francisco	KMVQ-FM CA	LIC _CN	149.4 329.8	103.28 BLH19920427KB	37 41 15.0 122 26 04.0	40.000 396	100.7 452	83.3 Cbs Radio Kmvq-fm Inc.	-7.6	0.2
260D Santa Rosa	~~K263BN~~ CA	APP DV_	0.0 0.0	0.00 BPFT20161104ABM	38 29 20.0 123 01 53.0	0.010	0.0 363	0.7 Redwood Empire Stereocaste	-0.5*	-0.7*
260D Santa Rosa	~~K263BN~~ CA	APP DH_	0.0 0.0	0.00 BPFT20161104ABM	38 29 20.0 123 01 53.0	0.010	0.0 363	0.2 Redwood Empire Stereocaste	-0.5*	-0.2*
257A St. Helena	KVYN CA	LIC ZCN	96.3 276.7	61.82 BLH19960122KA	38 25 34.0 122 19 33.0	6.000 79	37.2 348	21.2 Wine Country Broadcasting	11.1	9.6
261D Rohnert Park Petalu	KZST-FM2 CA	LIC DC_	109.2 289.4	32.62 BLFTB20000215ABN	38 23 31.0 122 40 40.0	1.200 171	0.0 321	2.2 Redwood Empire Stereocaste	18.7	21.0
256D Hopland	K256BV CA	CP DC_	349.0 169.0	50.14 BPFT20160620ACC	38 55 54.0 123 08 30.0	0.129	0.8 825	22.6 One Ministries, Inc	46.8	26.3
260D Calistoga	K260BV CA	LIC DH_	59.9 240.2	40.12 BLFT20160509AAJ	38 40 09.0 122 37 53.0	0.003 910	0.0 1314	0.1 One Ministries, Inc.	27.8	38.0
261D Petaluma	KZST-FM1 CA	LIC DHN	114.6 294.8	41.95 BLFTB1	38 19 52.0 122 35 38.0	0.046	0.0 573	0.5 Redwood Empire Stereocaste	28.3	36.8
255B San Francisco	KSOL CA	LIC _C_	148.0 328.3	96.03 BLH19990723KF	37 45 19.0 122 27 06.0	6.100 409	4.4 440	62.8 Tms License California, In	81.3	32.8
256D Hopland	K256BV CA	LIC _C_	349.0 169.0	50.14 BLFT20160422AAQ	38 55 54.0 123 08 30.0	0.011	0.2 823	12.2 One Ministries, Inc	47.3	37.5

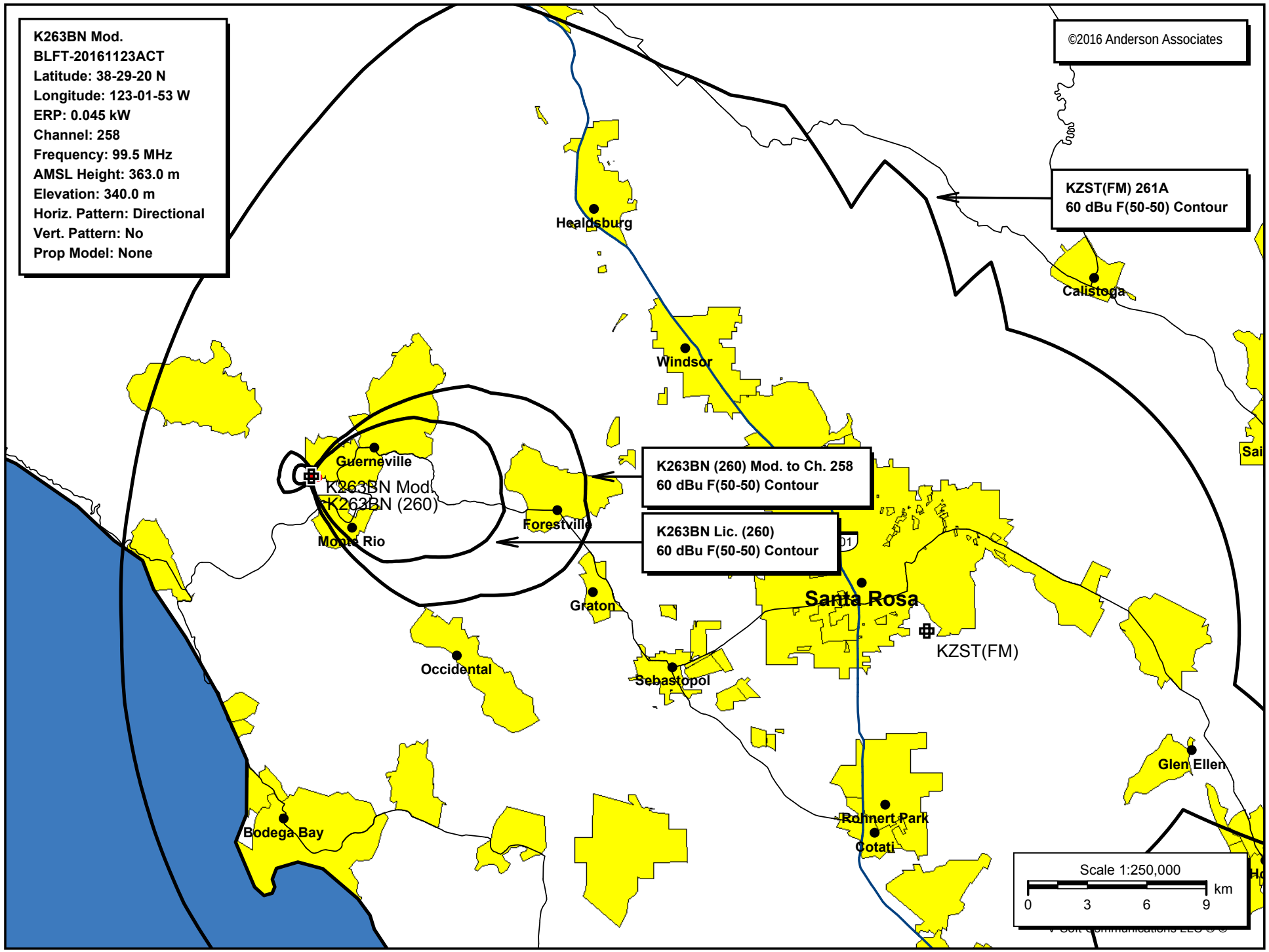
Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= East Zone 2A, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

(1) The K263BN (260) modification to channel 258 is within its primary KZST(FM) 261A protected contour. The +40 100 dBu F(50-10) contour does not overlap the KZST(FM) Santa Rosa, CA community of license community, as shown in exhibit E-2.

E-2 K253BN (260) Mod. to Ch. 258 100 dBu Contour Plot



E-3 K263BN (260) Mod. to Ch. 258 60 dBu Contour Plot



E-4 K263BN Mod. TOWAIR

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	38-29-19.7 north
Longitude	123-01-57.0 west

Measurements (Meters)

Overall Structure Height (AGL)	32
Support Structure Height (AGL)	0
Site Elevation (AMSL)	340

Structure Type

GTOWER - Guyed Structure Used for Communication Purposes

E-5 K263BN (260) Mod. Directional Antenna Pattern

Azimuth (deg)	Relative Field
0.0	0.01
10.0	0.01
20.0	0.01
30.0	0.02
40.0	0.085
50.0	0.25
60.0	0.47
70.0	0.645
80.0	0.82
90.0	0.95
100.0	1.0
110.0	0.95
120.0	0.82
130.0	0.645
140.0	0.47
150.0	0.25
160.0	0.085
170.0	0.02
180.0	0.01
190.0	0.01
200.0	0.01
210.0	0.01
220.0	0.015
230.0	0.025
240.0	0.034
250.0	0.038
260.0	0.04
270.0	0.04
280.0	0.04
290.0	0.04
300.0	0.04
310.0	0.038
320.0	0.034
330.0	0.025
340.0	0.015
350.0	0.01