

October 2015
FM Translator K265DB
Fort Bragg, California Channel 265D
Allocation Study

Coordinate Correction

The instant Form 349 application is being filed in order to correct the coordinate data for FM translator K265DB. It has been determined that the licensed coordinates are located about 300 meters from the actual tower location. This represents a correction of 9 seconds of latitude and 6 seconds of longitude, which requires the filing of a Form 349 application.

Allocation Study

The attached spacing study shows the spacing between the proposed translator site and the location of cochannel and adjacent channel stations and proposals. This study was made with the Commission's Class A spacing requirements, and individual situations were examined to determine the lack of prohibited contour overlap per the requirements of §74.1204 of the Rules. There are no cochannel or adjacent channel facilities close enough to require detailed allocation study maps to demonstrate compliance with the Commission's Rules for protection of FM broadcast stations and FM translators as outlined in §74.1204.

The attached spacing study demonstrates compliance with §73.207 of the Commission's Rules regarding spacing restrictions to stations which are 53 or 54 channels removed from the proposed operation.

=====

SEARCH PARAMETERS

FM Database Date: 151019

Channel: 265A 100.9 MHz

Page 1

Latitude: 39 27 54

Longitude: 123 45 28

Safety Zone: 50 km

Job Title: K265DB COORD CORRECTION

| Call Status | City St | FCC File No. | Channel Freq. | ERP(kW) HAAT(m) | Latitude Longitude | Bearing deg-True | Dist (km) | Req (km) |
|----------------|-------------------|--------------|------------------|--------------------|-----------------------|---------------------|--------------|-------------|
| KLAI | LAYTONVILLE | 212B | 0.500 | 39-41-38 | 31.0 | 29.71 | 15 | |
| LIC | CA BLED-60523ADU | 90.3 | 741.0 | 123-34-43 | | 14.71 | CLEAR | |
| KWPT | FORTUNA | 262C1 | 12.000 | 40-25-31 | 344.6 | 110.68 | 75 | |
| LIC | CA BLH-10913ABL | 100.3 | 577.2 | 124-06-19 | SS | 35.68 | CLEAR | |
| KWPTaux | FORTUNA | 262C1 | 1.000 | 40-30-03 | 338.9 | 123.51 | 0 | |
| CP | CA BXPB-30528AGM | 100.3 | 520.0 | 124-17-06 | | 0.00 | AUX | |
| KTDE | GUALALA | 263B1 | 6.000 | 38-49-33 | 167.1 | 72.79 | 48 | |
| LIC | CA BLH-930816KA | 100.5 | 204.0 | 123-34-12 | SS | 24.79 | CLEAR | |
| KTHU | CORNING | 264B | 50.000 | 39-53-17 | 63.7 | 107.77 | 113 | |
| LIC | CA BMLH-930910KE | 100.7 | 83.0 | 122-37-38 | | -5.23 | SHORT | |
| K265BT | ARCATA | 265D | 0.250 | 40-43-36 | 352.6 | 141.30 | 0 | |
| LIC | CA BLFT-10323ACA | 100.9 | 742.0 | 123-58-27 | | 0.00 | TRANS | |
| KSXY | FORESTVILLE | 265A | 2.500 | 38-44-08 | 135.7 | 112.89 | 115 | |
| LIC | CA BLH-10527ACZ | 100.9 | 156.3 | 122-50-55 | | -2.11 | SHORT | |
| K265DB | FORT BRAGG | 265D | 0.250 | 39-28-03 | 332.8 | 0.31 | 0 | |
| LIC | CA BLFT-940202TA | 100.9 | 243.0 | 123-45-34 | | 0.00 | TRANS | |
| K267BA | UKIAH | 266D | 0.010 | 39-07-51 | 122.1 | 69.55 | 0 | |
| CP MOD | CA BMPFT-30415ACN | 101.1 | 822.0 | 123-04-33 | | 0.00 | TRANS | |
| K267BA | UKIAH | 267D | 0.010 | 39-07-51 | 122.1 | 69.55 | 0 | |
| LIC | CA BLFT-21004ABQ | 101.3 | 822.0 | 123-04-33 | | 0.00 | TRANS | |
| KEKA-FM | EUREKA | 268C | 89.000 | 40-25-12 | 345.5 | 109.63 | 95 | |
| LIC | CA BLH-831212AA | 101.5 | 625.0 | 124-05-00 | | 14.63 | CLEAR | |

===== END OF FM SPACING STUDY FOR CHANNEL 265 =====

October 2015
FM Translator K265DB
Fort Bragg, California Channel 265D
RF Exposure Study

Facilities Proposed

The proposed operation is on Channel 265D (100.9 MHz) with an effective radiated power of 250 watts. Continued operation is proposed with the existing antenna which is mounted on an existing tower on Bald Hill.

The antenna support structure does not exceed 60.96 meters (200 feet) above ground and does not require notification to the Federal Aviation Administration. Therefore, this structure does not require an Antenna Structure Registration Number.

RF Exposure Calculations

The power density calculations shown below were made using the techniques outlined in OET Bulletin No. 65. "Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. The equation shown below was used to calculate the ground level power density figures from each antenna.

$$S(\mu W / cm^2) = \frac{33.40981 \times AdjERP(Watts)}{D^2}$$

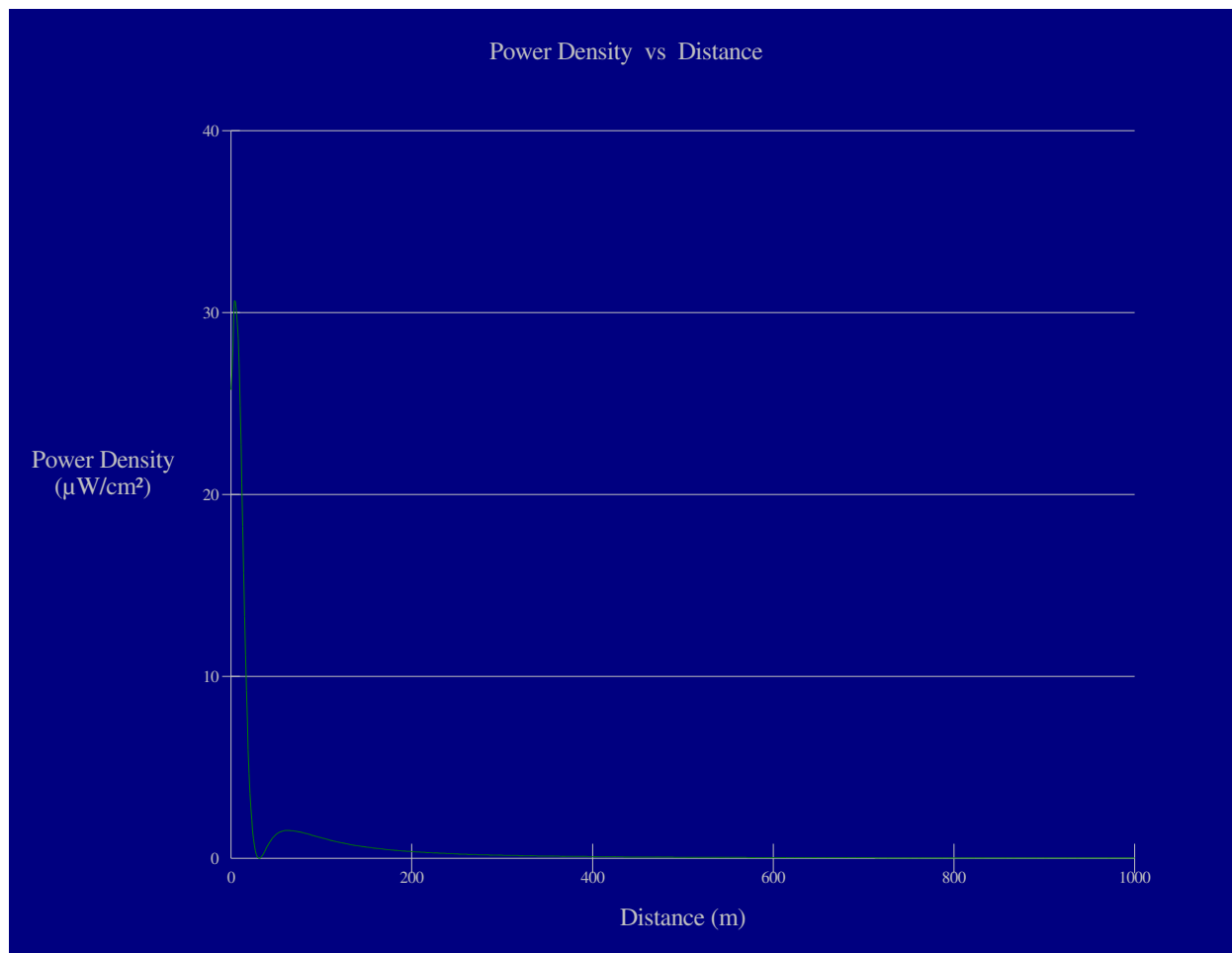
Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

Ground level power densities have been calculated for locations extending from the base of the tower to a distance of 1000 meters. Values past this point are increasingly negligible.

Calculations of the power density produced by the proposed antenna system assume a Type 1 element pattern, which is the element pattern for the Jampro JLST-2 "ring stub" antenna which is in use. The highest calculated ground level power density occurs at a distance of 4 meters from the base of the antenna support structure. At this point the power density is calculated to be 30.7 $\mu W/cm^2$, which is 3.1% of 1000 $\mu W/cm^2$ (the FCC standard for controlled environments) and 15.4% of 200 $\mu W/cm^2$ (the FCC standard for uncontrolled environments).

The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.



Ground-Level RF Exposure

OET FMModel

K265DB Fort Bragg

Antenna Type: Jampro JLST-2 "ring stub"

No. of Elements: 2

Element Spacing: 1.0 wavelength

Distance: 1000 meters

Horizontal ERP: 0.250 kW

Vertical ERP: 0.250 kW

Antenna Height: 20 meters AGL

Maximum Calculated Power Density is 30.7 $\mu\text{W}/\text{cm}^2$ at 4 meters from the antenna structure.

