

## K211DY SITE CHANGE APPLICATION

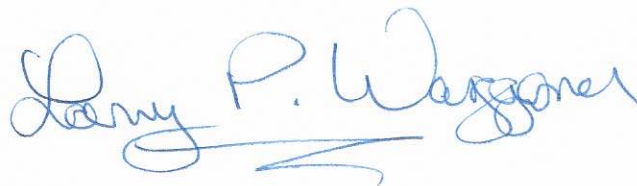
This application proposes to move the K211DY translator to a site that was approved in a 2016 construction permit (BPFT-20160304ABA) That permit expired in March 2019 before the site change move could be accomplished. This application requests the same operating parameters. The CP site still has the same spacings that allowed the original construction permit. There are three short spaced stations. The operating parameters of the three stations have not changed since the original approved 2016 application.

The IF spaced station is KZBL on 100.7 MHz in Natchitoches, LA. This application also requests an effective radiated power of 99 watts which will protect KZBL, in compliance with Part 74.1204(g) of the Commission's rules.

The other two short spaced stations are KLSA 90.7 MHz in Alexander, LA and KBIO 89.7 MHz in Natchitoches, LA. The vertical angel of radiation from the proposed SWR BK77-3HW three bay, half wave spaced antenna, will provide the protection necessary for the two close spaced station. The radiation angle study, included in the application, details the protection, which is in compliance with Part 74.1204(a)(3).

The site change will be a move to ASR tower number 1272540, a 152.4 meter tall tower, located 4.72 kilometers, on a bearing of 85.9 degrees from the licensed K211DY site.

This K211DY identical site change application is still in compliance with the Commission's Rules and Regulation.



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FM Study for: K211DY Database CDBS - Date: 4/29/2021

31-47-26

Location: NATCHITOCHES, LA Channel Class:

93-04-54

[\*] by HAAT indicates calculated as missing in database.

Contours calculated on direct line using 73.509(a)

Call Status	City, State Proponent	Chan File Number	Cl. File Number	Freq HAAT	kW	Latitude Longitude	Dist. Azim.	Required Clear (km)	Site
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&gt;&gt;&gt;&gt;&gt;&gt;&gt; Study For Channel 211 90.1 MHz &lt;&lt;&lt;&lt;&lt;&lt;&lt;

K211DY LIC	NATCHITOCHES, LA Fac. No. 93102	211 D	90.1	.01 62	31-47-13 93-07-51	4.7 265.1	44 -39.3	SHORT
KLSA LIC	ALEXANDRIA, LA Fac. No. 4218	214 C0	90.7	100 379	31-33-56 92-32-50	56.5 116.1	93 -36.5	SHORT
KBIO LIC	NATCHITOCHES, LA Fac. No. 85510	209 A	89.7	.1 90	31-47-13 93-07-52	4.7 265.1	29 -24.3	SHORT
KZBL LIC	NATCHITOCHES, LA Fac. No. 7824	264 C3	100.7	25 84	31-48-17 93-01-27	5.7 73.9	12 -6.3	SHORT
KLXA LIC	ALEXANDRIA, LA Fac. No. 43156	210 A	89.9	3 100	31-22-40 92-28-27	73.6 128.3	47 26.6	CLEAR
KDAQ LIC	SHREVEPORT, LA Fac. No. 4317	210 C1	89.9	100 284	32-40-40 93-55-30	126.5 321.3	91 35.5	CLEAR
KYLC LIC	LAKE CHARLES, LA Fac. No. 87832	212 C1	90.3	80 143	30-38-10 93-02-33	128.0 178.3	91 37.0	CLEAR

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04-30-2021

Project: K211DY

Site Coordinates: 31-47-26 North 93-04-54 West

NGDC 30-Second Database is used in Continental US

DEM-30 Database is used in AK, HI, and PR.

Azimuth	Elevation	HAAT	60 dBu
0	35	123	11.4 km
30	31	127	11.6 km
60	28	130	11.7 km
90	27	131	11.7 km
120	29	129	11.7 km
150	29	129	11.7 km
180	35	123	11.4 km
210	48	110	10.8 km
240	47	111	10.8 km
270	50	108	10.7 km
300	36	122	11.3 km
330	36	122	11.3 km

Data in (feet) meters

Overall Height Above Average Terrain: ( 400) 122 \*

Site Elevation AMSL: ( 135) 41

Antenna Height Above Ground Level: ( 383) 117

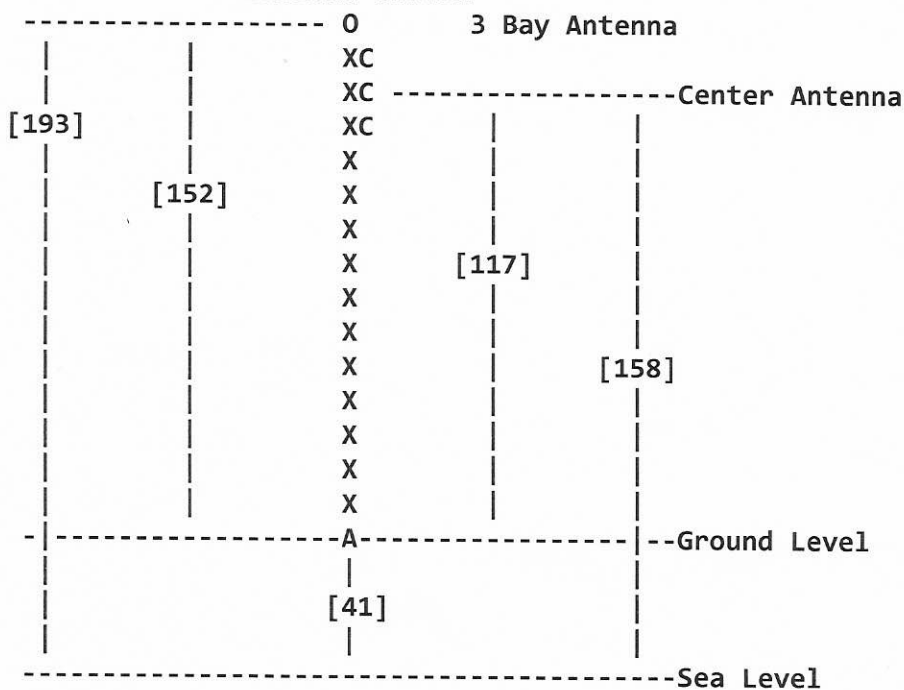
Antenna Center Above Sea Level: ( 518) 158

Overall Ground Average Terrain AMSL: ( 118) 36

Effective Radiated Power: 0.0990 kW \*

TV/FM Channel: 211

#### VERTICAL SKETCH





**K211DY Site Change  
60 dBu (1.0 mv/m)  
Contour Map**

**Proposed 60 dBu  
1.0 mv/m Contour**

**K211DY  
Licensed Site**

**K211DY  
New Site**

N31° 47' 15.00"  
W93° 7' 53.00"

N31° 47' 26.00"  
W93° 4' 54.00"

Grand Ecore

Natchitoches

Natchez

Fort Saint Jean  
Baptiste State  
Commemorative Area

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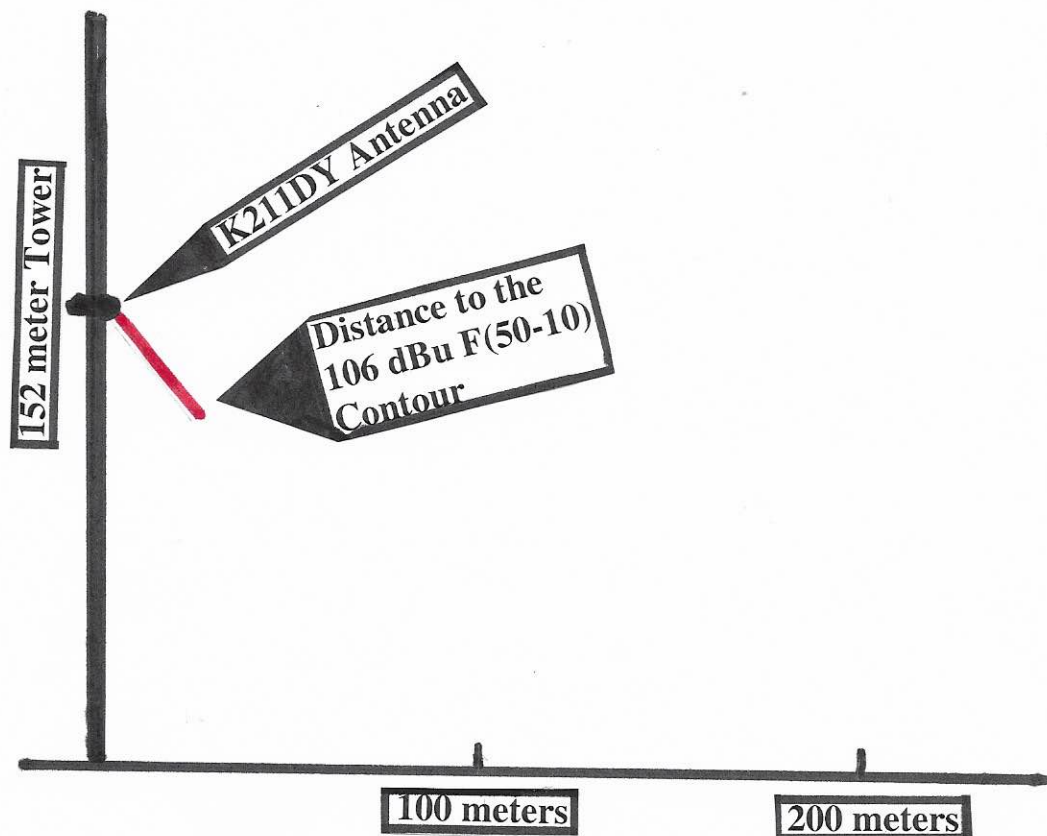
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TN  
★  
MN (0.5°E)

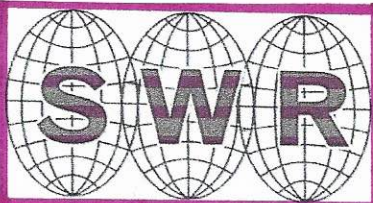
1 cm = 1.38 km Data Zoom 10-5

**Proposed SWR FMEC Half Waved Spaced  
3 Bay Antenna Possible Vertical Interference Data**

The proposed S.W.R. FMEC three bay half waved spaced antenna has only one minor vertical radiation lobe 60 degrees down from the main horizon lobe. Two existing stations requiring radiation protection from the new K211DY site were found in the FM Spacing study. They are KLSA in Alexandria, LA and KBIO in Natchitoches, LA. The KLSA signal level at the new K211DY site was calculated to be 69.6 dBu. The KBIO signal level was found to be 66.0 dBu. The possible interference level to KBIO will be the most critical. The proposed K211DY 106 dBu F(50-10) interference level signal will extend to a distance of only 26.4 meters, some eighty plus meters above any possible ground level interference. The 109.7 dBu F(50-10) interference contour will only extend to a distance of 17.5 meters, also well above ground level. Any possible K211DY interference level to either KLSA or KBIO will be within FCC regulations.



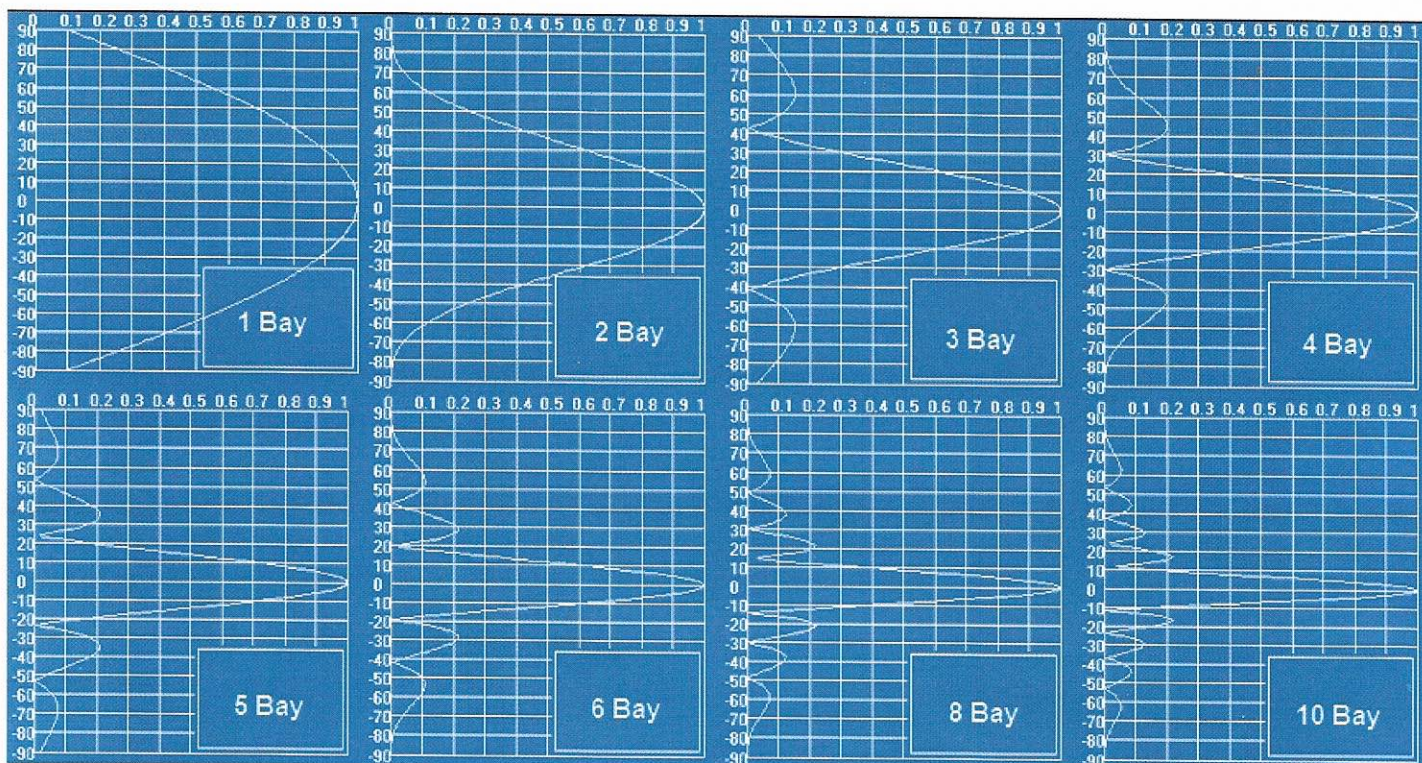




## 1/2 Wave Spaced Specifications

### FMEC SERIES CIRCULAR POLARIZED LOW POWER FM ANTENNAS

Bays	Power Rating (watts)	Power Gain	dB Gain	Net. Weight (lbs)	Windload (lbs)
1	500	0.441	-3.556	15	35
2	1000	0.695	-1.580	35	85
3	1500	1.012	0.052	50	120
4	2000	1.313	1.183	65	155
5	2000	1.623	2.103	80	190
6	2000	1.924	2.842	95	225
8	2000	2.528	4.028	110	260
10	2000	3.129	4.954	125	295



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