

ENGINEERING EXHIBIT

Full Power FM Station Application for Minor Modification of Licensed Facility prepared for

Delta Media Corporation
KFXZ-FM Opelousas, LA
Facility ID 9416
Ch. 290A (105.9 MHz) 3.8 kW 128 m

Delta Media Corporation (“Delta”) is the licensee of KFXZ-FM, Channel 290A, Opelousas LA (file number BMLH-20190828AAJ). KFXZ-FM is licensed to operate with 3.4 kW effective radiated power (“ERP”) nondirectional at 132 meters antenna height above average terrain (“HAAT”). *Delta* herein seeks a Construction Permit to increase KFXZ-FM’s power to 3.8 kW ERP utilizing the presently licensed antenna.

No change to the antenna location or height is proposed. The KFXZ-FM antenna is side-mounted on the tower structure associated with FCC Antenna Structure Registration number 1046932.

In 2019 a license modification (BMLH-20190828AAJ) provided a correction of the KFXZ-FM transmitting location’s geographic coordinates. Now, considering the previous coordinate correction and using FCC OET 30 meter terrain data, the KFXZ-FM antenna HAAT is recalculated to be 128.3 meters. Thus, the proposed KFXZ-FM will operate with 3.8 kW ERP at 128 meters antenna HAAT. This ERP/HAAT combination represents a maximum Class A facility.

The principal community of Opelousas is encompassed by the proposed KFXZ-FM 70 dB μ coverage contour. The attached Figure 1 supplies a coverage contour map for the proposed facility, demonstrating compliance with §73.315(a) regarding coverage of the principal community.

An allocation spacing summary table for the KFXZ-FM transmitter site is provided in Table 1. KFXZ-FM meets the §73.207 minimum distance separation requirements with respect to all other stations, allotments, and proposals as contained within the FCC LMS database.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The KFXZ-FM operation was evaluated for human exposure to RF energy using the procedures outlined in the FCC's OET Bulletin Number 65. According to the FCC's "FMModel" software analysis¹ and the licensed KFXK-FM antenna configuration (a three element EPA Type-2 antenna type having 1 wavelength spacing), the maximum RF electromagnetic field near the tower at two meters above ground level attributable to KFXZ-FM is $2.3 \mu\text{W}/\text{cm}^2$, which is 1.2 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent. No other authorized broadcast facilities are near enough to the site to contribute significant RF levels.

The general public will not be exposed to RF levels attributable to KFXZ-FM in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

This exhibit is limited to the evaluation of exposure to RF electromagnetic field. The proposal involves continued use of a side-mounted transmitting antenna on an existing antenna support structure. No tower work or change in structure height is proposed.

¹ "Office of Engineering and Technology Announces Updates to FMModel Software," Public Notice, DA 16-340, March 31, 2016. FMModel is available at <https://www.fcc.gov/oet/software/fmmodel>.

List of Attachments

Figure 1 Corrected Coverage Contours
Table 1 KFXZ-FM §73.207 Allocation Spacing Study
Form 2100 Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E. November 2, 2023
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

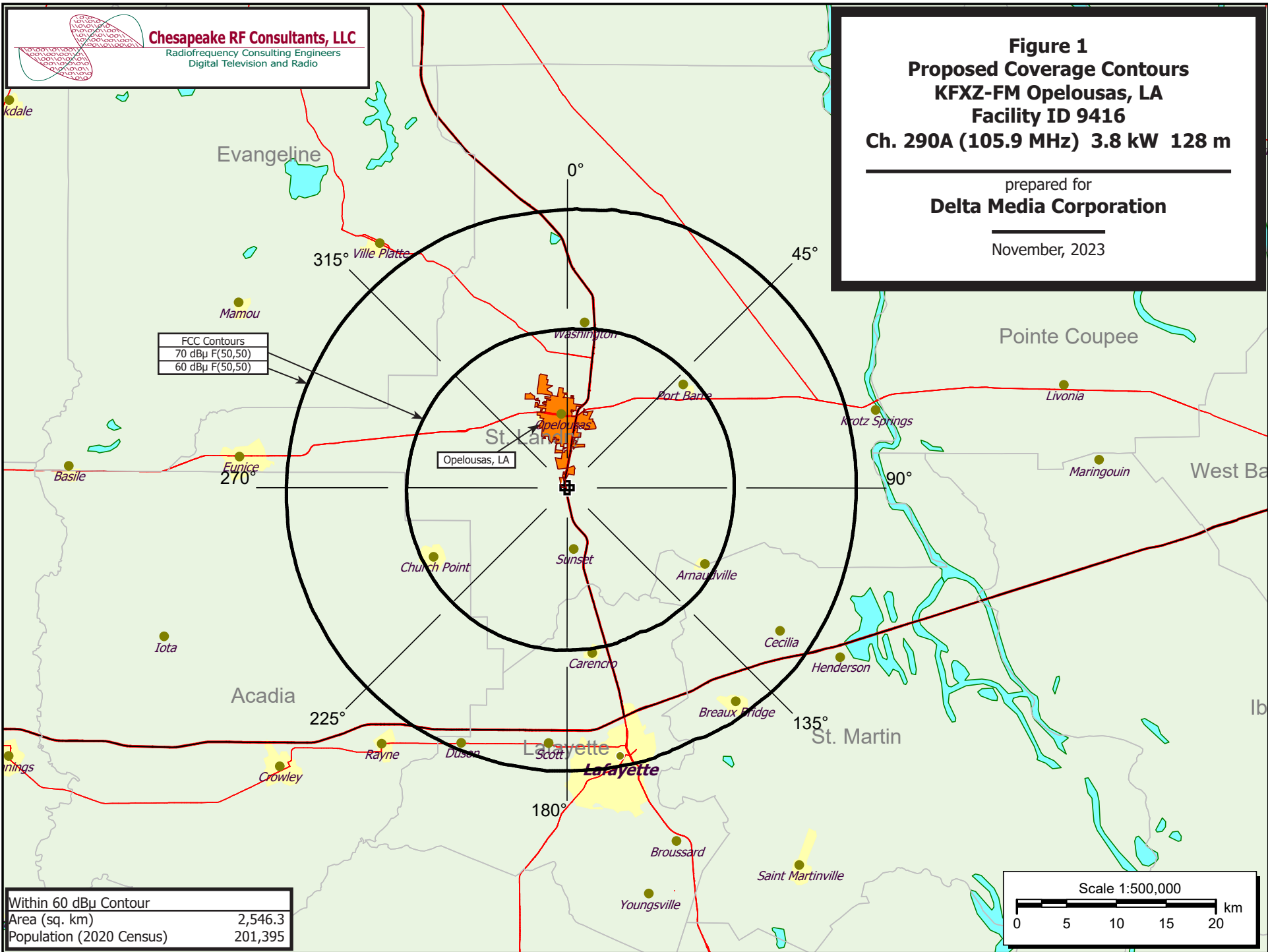


Table 1
§73.207 Allocation Spacing Study
prepared for
Delta Media Corporation
KFXZ-FM Opelousas, LA

REFERENCE
30 27 59.50 N. CLASS = A
92 04 30.70 W. Current Spacings to 3rd Adj.
----- Channel 290 - 105.9 MHz -----

DISPLAY DATES
DATA 11-02-23
SEARCH 11-02-23

Call	Channel	Location	Azi	Dist	FCC	Margin
KEUN-FM	CP	288A Eunice	LA	271.0	32.56	1.6
KBZE	LIC	290A Berwick	LA	132.0	117.14	2.1
KYMK-FM	LIC	292A Maurice	LA	185.3	34.62	3.6
KEUN-FM	LIC	288A Eunice	LA	265.0	35.85	4.9
KSLO-FM	LIC	287A Simmesport	LA	15.4	50.11	19.1
KQXL-FM	LIC	293C2 New Roads	LA	78.5	89.15	34.2
KIOC	LIC	291C0 Orange	TX	259.8	187.01	35.0
KVVP	LIC	289C3 Leesville	LA	297.8	129.80	40.8
WAKH	LIC	289C1 Mccomb	MS	59.3	179.60	46.6
KDDK	LIC	288A Addis	LA	101.6	77.92	46.9
KBKK	LIC	288A Ball	LA	343.7	111.12	80.1
KXRR	LIC	291C0 Monroe	LA	359.7	243.22	91.2
WRKN	LIC	291C2 Picayune	MS	87.7	197.39	91.4

Channel and
Facility
Information

Section	Question	Response
Proposed Community of License	State	Louisiana
	City	OPELOUSAS
	Channel	290
	Frequency	105.9
Facility Type	Facility Type	Commercial
Station Class	Station Class	A

Antenna
Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1046932
Coordinates (NAD83)	Latitude	30° 27' 59.5" N+
	Longitude	092° 04' 30.7" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	140.2 meters
	Support Structure Height	139.0 meters
	Ground Elevation (AMSL)	7.6 meters
Antenna Data	Height of Radiation Center Above Ground Level	Horizontal:134 meters Vertical:134 meters
	Height of Radiation Center Above Average Terrain	Horizontal:128 meters Vertical:128 meters

	Height of Radiation Center Above Mean Sea Level	Horizontal:141.6 meters Vertical:141.6 meters
	Effective Radiated Power	Horizontal:3.8 kW Vertical: 3.8 kW
	Proposed Allotment or Assignment - Coordinates (NAD83)	Latitude
Longitude		

Antenna Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Non-Directional

Directional Antenna Relative Field Value

Degree	Value	Degree	Value	Degree	Value	Degree	Value
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Additional Azimuths

Degree	Value
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Technical Certifications

Section	Question	Response
Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See 47 C.F.R. Section 1.1306)	No
Broadcast Facility	Does the proposed facility comply with the applicable engineering standards and assignment requirements of 47 C.F.R. Sections 73.203, 73.207, 73.213, 73.315, 73.509, 73.515, 73.525, and 73.1125?	Yes
Contour Protection	Does the proposed facility request processing pursuant to the contour protection provisions of 47 C.F.R Section 73.215?	No
Community of License Change - Section 307(b)	Is the application being submitted to change the facility's community of license? If 'Yes', an exhibit is required containing information demonstrating that the proposed community of license change constitutes a preferential arrangement of assignments under Section 307(b) of the Communications Act of 1934, as amended (47 U.S.C. Section 307(b))	No