

***APPLICATION FOR CONSTRUCTION PERMIT
DISPLACEMENT***

**K39JV – OPELOUSAS, LOUISIANA
FACILITY ID: 47721**

DIGITAL NETWORKS–SOUTHEAST, LLC

OCTOBER 2020

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10.1.2020

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APPLICATION FOR CONSTRUCTION PERMIT - DISPLACEMENT

The following engineering statement and attached exhibits have been prepared for **Digital Networks-Southeast, LLC** ("Southeast"), licensee of analog low power television station K39JV at Opelousas, Louisiana, and are in support of their application for construction permit for displacement of that facility.¹ The current license for the analog facility is assigned FCC File No. BLTT-20071011ABI. This application seeks channel displacement relief, and to physically relocate the transmitter facility according to Commission Rules and Policies.

The licensed facility is authorized to operate on television channel 39 with a maximum effective radiated power of 15.9 kW at a center of radiation of 152.2 meters above mean sea level, 133 meters above ground level, utilizing a directional facility. The proposed facility would operate on television channel 14 with a maximum effective radiated power of 2 kW at a center of radiation of 33.2 meters above mean sea level, 30 meters above ground level, utilizing a composite directional antenna. The proposed composite array consists of two Kathrein-Scala PR-TV antennas, with one element oriented at 105 degrees true, and the other at 320 degrees true. Equal power division is employed between the constituent elements.

The map in Exhibit E-1 provides a contour comparison map between the licensed and proposed technical parameters. This map demonstrates that the proposed 51 dBu F(50,90) service contour overlaps a portion of the licensed 74 dBu F(50,50) contour. Additionally, this map also demonstrates that the proposed transmitter site is located within 30 miles of the licensed transmitter site.

¹ The Facility ID for K39JV at Opelousas, Louisiana is 47721.

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Exhibit E-2 is the output from *TVStudy* for the proposed facility. This study demonstrates that there are no outgoing interference check failures to any proposed or authorized facility. This study was performed at a cell size resolution of 1.0 kilometers, and a profile spacing increment of 1.0 kilometer.

The proposed facility would not constitute a significant environmental impact, and is exempt from environmental processing. The proposed antenna would be mounted to an existing tower that is registered with the Commission. The addition of the antenna to this tower would not increase the already existing environmental impact present from the tower.

In addition, the proposed facility would not result in human exposure at ground level to radiofrequency radiation in excess of the Commission's safety standards. Using the equations in Supplement A of *OET Bulletin 65*, the calculated worst-case power density at ground level assuming a downward radiation relative field of 0.3 is $7.67 \mu\text{W}/\text{cm}^2$. This value is substantially below the upper limit of the uncontrolled environment condition. Southeast certifies it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

The proposed facility complies with the provisions of Section 74.709 of the Commission's Rules. No land mobile protection issues have been identified based on the tables in that section of the rules, or on the output of *TVStudy*. The proposed facility also complies with Sections

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74.793(e)-(h) and 74.793(h) of the Commission's Rules. The proposed facility is not located within the vicinity of the Table Mountain receiving zone. Additionally, the proposed facility is located at a large distance from both the Kingsville, TX monitoring station, and the West Virginia quiet zone area.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature
License Expires November 30, 2021

Jeremy D. Ruck, PE
October 1, 2020

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K39JV.X
 PROPOSED
 Latitude: 30-24-16.70 N
 Longitude: 091-50-15.30 W
 ERP: 2.00 kW
 Channel: 14
 Frequency: 473.0 MHz
 AMSL Height: 33.2 m
 Horiz. Pattern: Directional
 Prop Model: None

K39JV
 BLTT-20071011ABI
 Latitude: 30-36-41.60 N
 Longitude: 092-08-24.30 W
 ERP: 15.90 kW
 Channel: 39Z
 Frequency: 623.0 MHz
 AMSL Height: 152.2 m
 Horiz. Pattern: Omni
 Prop Model: None

Jeremy Ruck & Associates, Inc.

- Proposed K39JV 51 dBu F(50,90) Contour
- Licensed 74 dBu F(50,50) Contour
- Proposed Site 30-mile Radius

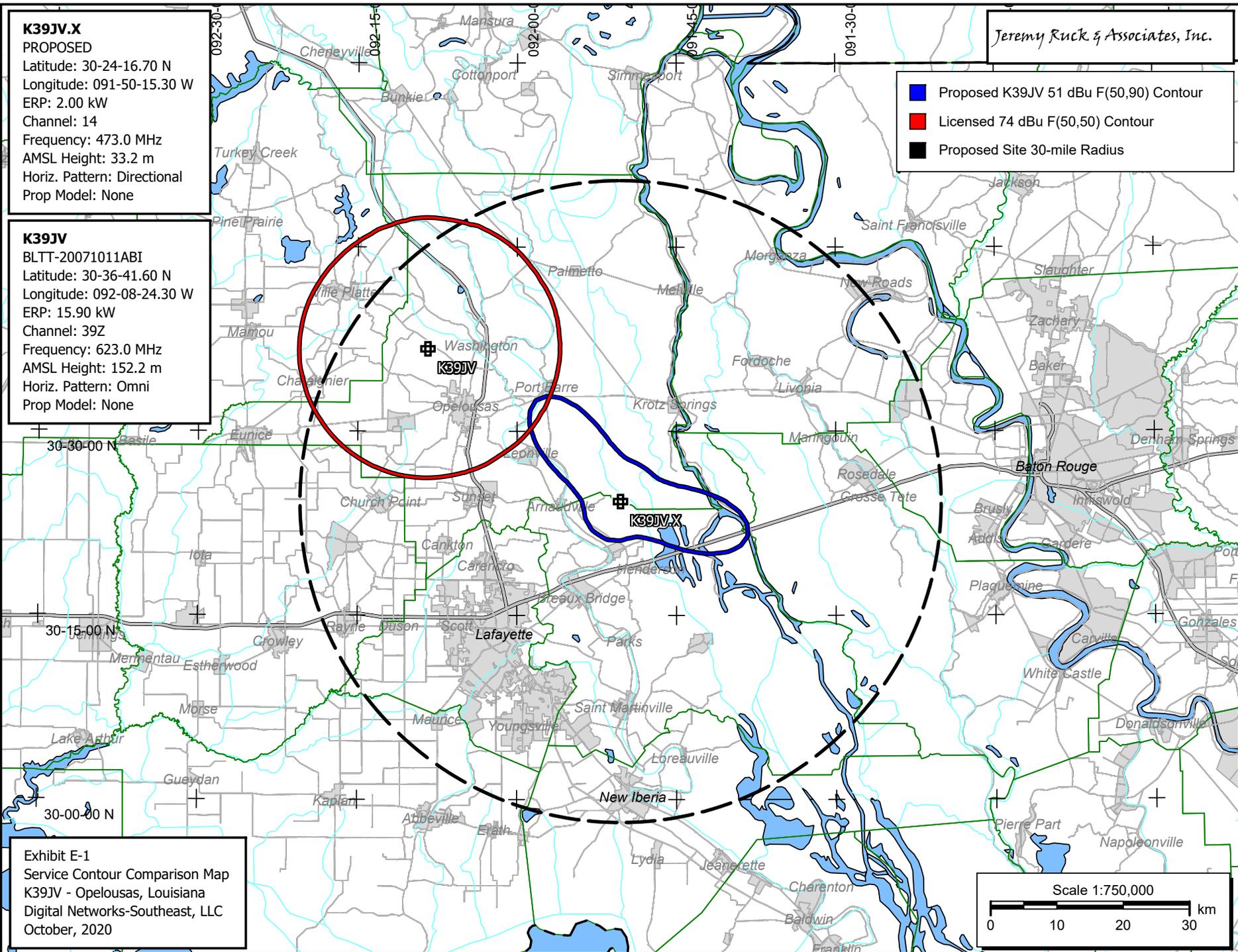


Exhibit E-1
 Service Contour Comparison Map
 K39JV - Opelousas, Louisiana
 Digital Networks-Southeast, LLC
 October, 2020

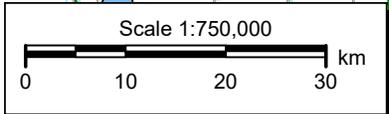


Exhibit E-2 - TVStudy Interference Study

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: K39JV DISP CH 14 ASRN 1284466 COR 33.2 m AMSL 2 kW ERP PR-TV x2 105,320, Model: Longley-Rice
Start: 2020.10.01 14:45:51

Study created: 2020.10.01 14:45:51

Study build station data: LMS TV 2020-10-01

Proposal: K39JV D14 LD LIC OPELOUSAS, LA
File number: BLTT20071011ABI
Facility ID: 47721
Station data: User record
Record ID: 31
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K14OK-D	D14	LD	CP	EL DORADO, AR	BNPDTL20100428ACK	321.6 km
No	WFGX	D14	DT	LIC	FORT WALTON BEACH, FL	BLANK0000121010	402.1
No	KPNB-LD	D14	LD	LIC	BATON ROUGE, LA	BLDTL20100111ADP	67.7
Yes	KLAF-LD	D14	LD	LIC	LAFAYETTE, LA	BLANK0000081306	29.7
No	KYHT-LD	D14	LD	CP	LAKE CHARLES, LA	BLANK0000054614	107.6
No	W14EH-D	D14	LD	CP	GREENVILLE, MS	BLANK0000036284	341.7
No	WDBD	D14	DT	LIC	JACKSON, MS	BLANK0000064020	244.0
No	W14DV-D	D14	LD	CP	PURVIS, MS	BNPDTL20100510AFA	250.1
No	NEW	D14	LD	APP	BEAUMONT, TX	BNPDTL20090825AYS	212.9
No	NEW	D14	LD	APP	BEAUMONT, TX	BNPDTL20090825AQZ	212.9
No	K14TB-D	D14	LD	CP	COLLEGE STATION, TX	BLANK0000116855	423.4
No	KVQT-LD	D14	LD	CP	HOUSTON, TX	BLANK0000053657	365.5
No	KIBN-LD	D14	LD	LIC	LUFKIN, TX	BLANK0000001197	299.1
No	K14QT-D	D14	LD	LIC	TEXARKANA, TX	BLANK0000081887	397.7
No	WNOL-TV	D15	DT	LIC	NEW ORLEANS, LA	BLCDT20121019AAR	187.6
No	WNTZ-TV	D15	DT	LIC	NATCHEZ, MS	BLANK0000071605	141.2
No	KFDM	D15	DT	LIC	BEAUMONT, TX	BLANK0000063111	207.7

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D14
Mask: Full Service
Latitude: 30 24 16.70 N (NAD83)
Longitude: 91 50 15.30 W
Height AMSL: 33.2 m
HAAT: 28.2 m
Peak ERP: 2.00 kW
Antenna: SCA PR-TV x2 1@105 1@320 0.0 deg
Elev Pattn: Generic

48.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.034 kW	28.8 m	8.2 km
45.0	0.019	27.3	7.1
90.0	0.814	28.4	18.3
135.0	0.068	30.3	9.8
180.0	0.014	28.2	6.7
225.0	0.016	27.5	6.9
270.0	0.014	26.8	6.6
315.0	1.77	28.2	21.9

Distance to Canadian border: 1495.3 km

Distance to Mexican border: 700.3 km

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Exhibit E-2 - TVStudy Interference Study

Conditions at FCC monitoring station: Kingsville TX
 Bearing: 242.2 degrees Distance: 674.0 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
 Bearing: 315.3 degrees Distance: 1622.0 km

No land mobile station failures found

Study cell size: 1.00 km
 Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
 Maximum new IX to LPTV: 2.00%

 Interference to BLANK0000081306 LIC scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	KLAF-LD	D14	LD	LIC	LAFAYETTE, LA	BLANK0000081306				
Undesireds:	K39JV	D14	LD	LIC	OPELOUSAS, LA	BLTT20071011ABI	29.7 km			
	KYHT-LD	D14	LD	CP	LAKE CHARLES, LA	BLANK0000054614	84.7			
	Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
	3408.8	410,378	3408.8	410,378	3382.7	407,738	3185.8	403,402	5.82	1.06
Undesired			Total IX		Unique IX, before		Unique IX, after			
	K39JV D14 LD LIC	196.9		4,336		196.9		4,336		
	KYHT-LD D14 LD CP	26.1		2,640		26.1		2,640		

 Interference to proposal scenario 1
 30.92% interference received

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance			
	K39JV	D14	LD	LIC	OPELOUSAS, LA	BLTT20071011ABI				
Undesireds:	KLAF-LD	D14	LD	LIC	LAFAYETTE, LA	BLANK0000081306	29.7 km			
	Service area		Terrain-limited		IX-free		Percent IX			
	448.8	8,206	448.8	8,206	328.8	5,669	26.73	30.92		
Undesired			Total IX		Unique IX		Prct Unique IX			
	KLAF-LD D14 LD LIC	120.0		2,537		120.0		2,537		26.73 30.92

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