

TECHNICAL EXHIBIT
MINOR AMENDMENT APPLICATION
FM STATION KTJJ (FACILITY ID 35533)
FARMINGTON, MISSOURI

JULY 8, 2009

CH 253C 100 KW 453 M

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Technical Narrative

This Technical Exhibit was prepared on behalf of radio station KTJJ, licensed to Farmington, Missouri. KTJJ operates as a Class C station with a non-directional effective radiated power (ERP) of 100 kilowatts (kW) and an antenna height above average terrain (HAAT) of 317 meters¹. Station KFCM has an application pending² which “triggers” a downgrade for KTJJ to a Class C0 station. The pending application proposes an antenna HAAT of 600 meters (maximum Class C operation). However, the Federal Aviation Administration (FAA) has indicated the required tower height would be a presumed hazard. Thus, this amendment is being filed to reduce the antenna HAAT to 453 meters.

Purpose of Application

In response to an application filed by FM station KFCM seeking to change transmitter site, change station class and change community of license,³ the FCC issued an Order to Show Cause directed to KTJJ to show cause why its facilities should not be reclassified to a Class C0 facility because its current HAAT (317 meters) was less than the Class C minimum (450 meters) with an ERP of 100 kW.

In response to the Order to Show Cause, KTJJ notified the FCC of its intent to file an application within 180 days of the date set forth in the Order to Show Cause to increase its HAAT to at least 451 meters in order to attain minimum Class C facilities. Therefore, this instant application proposes to increase the licensed KTJJ HAAT to 453 meters and maintain KTJJ’s Class C status. The instant application is considered a “minor” change in facilities in accordance with Section 73.3573(a)(1).

¹ See BLH-19821215AD

² See BPH-20070516ABF

³ See BPH-20070516ABF

Proposed Facilities

This application proposes to construct a new, 915-foot (279 meter) tower adjacent to the existing one. The new geographic coordinates are (NAD27): 37-43-16 N, 90-32-57 W. It is proposed to operate with a non-directional antenna ERP of 100 kW and antenna HAAT of 453 meters. A 6-bay “rototiller” antenna will be mounted at the 883-foot (761 meters) level on the new tower. The Federal Aviation Administration (FAA) has been notified of the proposed structure and has issued study number 2009-ACE-896-OE (see Figure 2). Once approval has been made by the FAA, the structure will be registered with the FCC.

Proposed Coverage

Figure 3 is a map showing the predicted FCC coverage contours for the proposed operation. The FCC predicted 70 dBu coverage contour will encompass the entire Farmington city limits, as derived from 2000 U.S. Census data.

The overall average HAAT (453 meters, rounded to the nearest meter) was determined from the N.G.D.C. 30-second terrain database, using 8 uniform radials.

Allocation Study

Sheet 1 of Figure 4 is an allocation study for channel 253C from the proposed transmitter site. The site meets the FCC's minimum separation requirements, specified in Section 73.207(b) of the Commission's Rules, to all assignments and stations except to four:

KYKY, Ch251C1, St. Louis, MO (facility id 20358)
KFUO-FM, Ch256C0, Clayton, MO (facility id 65924)
KFCM(Lic), Ch252C3, Cherokee Village, AR (facility id 34416)
KFCM(App), Ch252C2, Ash Flat, AR (facility id 34416)⁴

⁴ This pending application will no longer comply with the FCC's allocation criteria as KTJJ is proposing to increase its antenna HAAT to 600 meters herein.

Stations KYKY and KFUE-FM both operate from the same transmitter site, located 97 kilometers from the KTJJ transmitter site. The minimum separation distance with respect to KTJJ for both of these stations is 105 kilometers. Thus, these two stations are “short-spaced” with KTJJ by 8 kilometers. Sheet 2 of Figure 4 is a separation study from the existing (licensed) KTJJ transmitter site. The short-spacing was based on a waiver of the minimum spacing requirements (Section 73.207), which was supported by an agreement between the three stations drafted in January, 1987. As the current distance separation between KTJJ and both KYKY and KFUE-FM of 97 kilometers does not meet the Section 73.215 minimum separation distance of 99 kilometers, this separation distance becomes the minimum distance separation with respect to both KYKY and KFUE-FM. As the KTJJ proposal will maintain this 97 kilometer distance, continued “grandfathering” of this short-spacing is requested.

Station KFUE is located 172 kilometers from the proposed KTJJ transmitter site. The Section 73.207 minimum separation distance applicable for these two stations is 188 kilometers. This short-spacing was created by BMPH-20000508AAO in which KFUE requested processing under Section 73.215 with respect to KTJJ. KTJJ was protected as a full Class C station. Therefore, since the proposal will not decrease the separation distance with KFUE, KTJJ can operate as a full Class C station from its proposed transmitter site, herein.

Radiofrequency Electromagnetic Field Exposure

The proposed FM facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Based on the FCC's FM Model program using a 6-bay “rototiller” antenna, the calculated power density at a point 2 meters above ground level is calculated to be 0.007 mW/cm^2 , which is 3.5% of the FCC's recommended limit of 0.2 mW/cm^2 for FM channels, applicable to general population/uncontrolled exposure areas.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to

radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed operation appears to be otherwise categorically excluded from environmental processing.

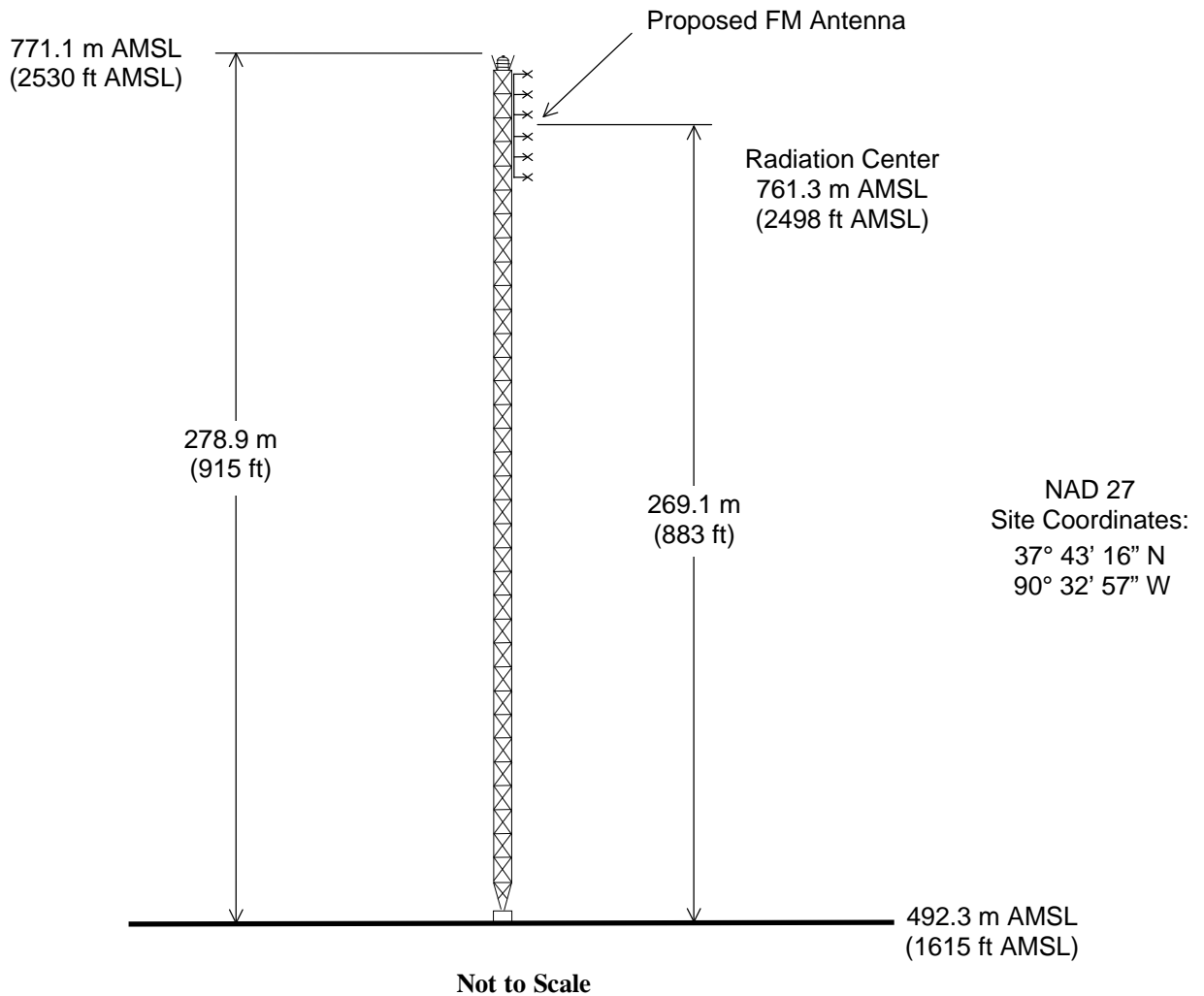
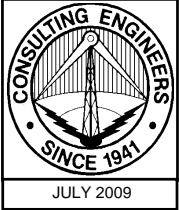
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



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July 8, 2009



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

FM STATION KTJJ

FARMINGTON, MISSOURI

CH 253C 100 KW 453 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2

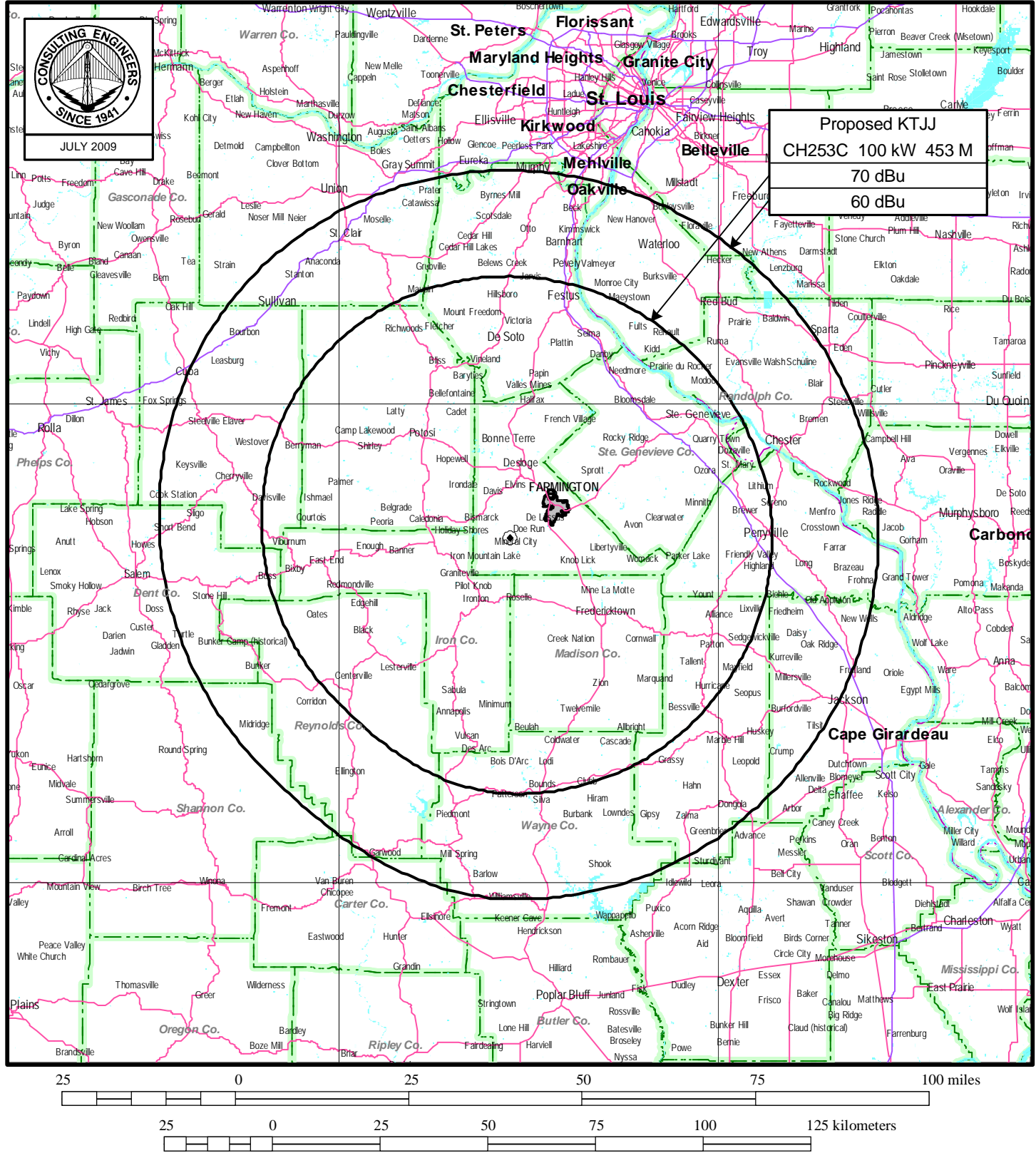
Form 7460-1 for ASN: 2009-ACE-896-OE

For information only.

This proposal has not yet been studied. Study outcomes will be posted at a later date.
Public comments are not requested, and will not be considered at this time.

Overview				
Study (ASN): 2009-ACE-896-OE		Received Date: 06/09/2009		
Prior Study: 2008-ACE-3960-OE		Entered Date: 06/09/2009		
Status: Work In Progress		Map: View Map		
Construction Info				
Structure Summary				
Notice Of: CONSTR		Structure Type: Antenna Tower		
Duration: PERM (Months: 0 Days: 0)		Other Description: KTJJ-C		
Work Schedule: 07/01/2010 to 11/01/2010		NACG Number:		
		FCC Number:		
Structure Details				
Height and Elevation				
Latitude (NAD 83): 37° 43' 16.18" N				Proposed
Longitude (NAD 83): 90° 32' 57.94" W				
Datum: NAD 83		Site Elevation:		1615
City: Doe Run		Structure Height:		915
State: MO		Total Height (AMSL):		2530
Frequencies				
Low Freq	High Freq	Unit	ERP	Unit
98.5	98.5	MHz	100	kW

Figure 3



PREDICTED COVERAGE CONTOURS

FM STATION KTJJ

FARMINGTON, MISSOURI

CH 253C 100 KW 453 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida

FM Study

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida


Station Channel: 253 **Station Coordinates:** 037-43-16 090-32-57 (NAD 27)

Class: C **Buffer Distance:** 10 km

Comment: Proposed Transmitter Site

Callsign	Status	Channel	Service	Freq.	City	State	Co.	Rec Type	Latitude	Dist. (km)	Sep. (km)	Spacing (km)		
Facility ID	ARN			Class	DA	Ant ID	ERP (kW)	HAAT (m)	73.215	Longitude	Bear. (deg)	73.215 (km)	Comment	
KBXB	LIC	250	FM	97.9	SIKESTON			MO	US	C	036-59-52	113	105	8
16548	BLH	19970922KD		C2	N		50	143		Y	089-38-52	135	96	CLOSE
KYKY	LIC	251	FM	98.1	ST. LOUIS			MO	US	C	038-34-24	97	105	-8
20358	BMLH	20061006AAW		C1	N		90	313		N	090-19-30	12	99	SHORT
KFCM	APP	252	FM	98.3	ASH FLAT			AR	US	C	036-21-58	172	188	-16
34416	BPH	20070516ABF		C2	N		30	97		Y	091-28-35	209	176	SHORT
KFCM	RSV	252	FA	98.3	ASH FLAT			AR	US	C	036-18-33	178	188	-10
34416				C2							091-29-26	208	176	SHORT
KFCM	LIC	252	FM	98.3	CHEROKEE VILLAGE			AR	US	C	036-21-58	172	176	-4
34416	BLH	20001031ACN		C3	N		25	97		Y	091-28-35	209	165	SHORT
	RSV	252	FA	98.3	BLACK ROCK			AR	US	C	036-05-25	189	188	0
0	RM	10837		C2							091-08-55	197	176	CLOSE
WRIK-FM	LIC	252	FM	98.3	METROPOLIS			IL	US	C	036-45-09	211	209	2
63817	BLH	20030609ADV		C1	N		100	213		N	088-29-58	120	188	CLOSE
KTJJ	APP	253	FM	98.5	FARMINGTON			MO	US	C	037-43-16			
35533	BPH	20080321ACO		C	N		100	600		N	090-32-57			
KTJJ	LIC	253	FM	98.5	FARMINGTON			MO	US	C	037-43-07			
35533	BLH	19821215AD		C			100	317		N	090-33-01			
WGCQ	RSV	254	FA	98.7	HAYTI			MO	US	C	036-21-08	169	165	4
64493				A							089-43-08	154	142	CLOSE
WGCQ	APP	254	FM	98.7	HAYTI			MO	US	C	036-19-06	173	165	8
64493	BPED	20090407AJC		A	N		6	67		Y	089-42-01	154	142	CLOSE
KFUO-FM	LIC	256	FM	99.1	CLAYTON			MO	US	C	038-34-24	97	105	-8
65924	BMLH	20061010ACZ		C0	N		100	313		Y	090-19-30	12	99	SHORT

FM Study

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida


Station Channel: 253 **Station Coordinates:** 037-43-07 090-33-01 (NAD 27)

Class: C **Buffer Distance:** 10 km

Comment: Present (licensed) Transmitter Site

Callsign	Status	Channel	Service	Freq.	City		State	Co.	Rec Type	Latitude	Dist. (km)	Sep. (km)	Spacing (km)	
Facility ID	ARN			Class	DA	Ant ID	ERP (kW)	HAAT (m)	73.215	Longitude	Bear. (deg)	73.215 (km)	Comment	
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KYKY	LIC	251	FM	98.1	ST. LOUIS			MO	US	C	038-34-24	97	105	-8
20358	BMLH	20061006AAW		C1	N		90	313		N	090-19-30	12	99	SHORT
KFCM	APP	252	FM	98.3	ASH FLAT			AR	US	C	036-21-58	171	188	-17
34416	BPH	20070516ABF		C2	N		30	97		Y	091-28-35	209	176	SHORT
KFCM	RSV	252	FA	98.3	ASH FLAT			AR	US	C	036-18-33	177	188	-11
34416				C2							091-29-26	208	176	SHORT
KFCM	LIC	252	FM	98.3	CHEROKEE VILLAGE			AR	US	C	036-21-58	171	176	-5
34416	BLH	20001031ACN		C3	N		25	97		Y	091-28-35	209	165	SHORT
	RSV	252	FA	98.3	BLACK ROCK			AR	US	C	036-05-25	188	188	0
0	RM	10837		C2							091-08-55	197	176	CLOSE
WRIK-FM	LIC	252	FM	98.3	METROPOLIS			IL	US	C	036-45-09	211	209	2
63817	BLH	20030609ADV		C1	N		100	213		N	088-29-58	120	188	CLOSE
KTJJ	APP	253	FM	98.5	FARMINGTON			MO	US	C	037-43-16			
35533	BPH	20080321ACO		C	N		100	600		N	090-32-57			
KTJJ	LIC	253	FM	98.5	FARMINGTON			MO	US	C	037-43-07			
35533	BLH	19821215AD		C			100	317		N	090-33-01			
WGCQ	RSV	254	FA	98.7	HAYTI			MO	US	C	036-21-08	169	165	4
64493				A							089-43-08	154	142	CLOSE
WGCQ	APP	254	FM	98.7	HAYTI			MO	US	C	036-19-06	173	165	8
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