

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION WXLK(FM)
ROANOKE, VIRGINIA

AUGUST 25, 2010

CH 222C 100 KW (MAX-DA) 605 M

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Table of Contents

	Technical Narrative
Figure 1	Sketch of Antenna and Supporting Structure
Figure 2	Map of Proposed Predicted Coverage Contours
Figure 3	Proposed Site Allocation Study

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Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an application for construction permit for radio station WXLK(FM) on Channel 222C assigned to Roanoke, Virginia. The applicant proposes, via this minor-change application, to slightly relocate its transmitter site location and radiation center atop *Poor Mountain*. A directional antenna will continue to be employed for WXLK(FM).

Proposed Transmitter Location

A sketch showing the proposed antenna and supporting structure is shown on Figure 1. An existing tower is being proposed.

Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially 3 kilometers from the transmitting site. No interference is expected. However, the applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference, as required by Sections 73.315(b), 73.316(e) and 73.318.

Determination of Overall Antenna HAAT

The overall antenna height above average terrain (HAAT) was determined from a previous application for construction permit for station WSLC-FM on Channel 235C at Roanoke, Virginia.¹ The proposed operation of WXLK(FM) is nearly the same transmitter site as that for WSLC-FM (within one second of Latitude and Longitude) and therefore is entitled to employ these FCC accepted average terrain calculations.

Predicted Coverage Contours

Figure 2 is a map showing the predicted coverage contours. The distances to the predicted coverage contours were determined using the aforementioned defined average elevations of 3-16 km portions of radials spaced every 45degrees of azimuth. The antenna radiation center HAAT in each radial direction and the effective radiated powers were used in conjunction with the propagation prediction curves of Section 73.333 to determine the distances to contours.

Allocation Study

As discussed below, no new short-spacing to any station or allotment would be created by relocating WXLK(FM). There are two stations to which WXLK(FM) does not satisfy the Section 73.207(b) minimum distance separation requirements as tabulated in Sheet 1 of Figure 3. Each short-spacing is discussed separately below.

¹ See WSLC-FM FCC Application for Construction Permit: BPH-860403IG for average terrain values at the herein proposed transmitter site.

Section 73.213(a) processing is requested toward WKRR(FM) on Channel 222C0 at Asheboro, North Carolina.² As shown on Sheet 2 of Figure 3, no additional (or new) interference is predicted to WKRR(FM) from the proposed WXLK(FM).³ As also shown, no additional (or new) interference is predicted to WXLK(FM) from WKRR(FM).⁴ Therefore, the proposed facility satisfies the requirements of Section 73.213(a) of the Commission's Rules to WKRR(FM).

A continued waiver of Section 73.207 is requested toward WYFL(FM) on Channel 223C0 at Henderson, North Carolina. Based upon an analysis of the licensees of both WXLK(FM) and WYFL(FM), it appears that these stations have not been continuously short-spaced since 1964. However, the separation distance between WYFL(FM) and WXLK(FM) is actually increasing (from the present 205.06 kilometers to the proposed 205.12 kilometers) and as shown on Sheet 3 of Figure 3, no prohibited coverage overlap occurs between WYFL(FM) and the proposed WXLK(FM). Therefore, a continued waiver of Section 73.207 is justified.

² Stations WKRR(FM) and WXLK(FM) were operating before 1964 and appear to have been continuously short-spaced since that time.

³ The existing WXLK(FM) causes interference to WKRR(FM) to 78,730 persons over 1,447 square kilometers. The proposed WXLK(FM) causes interference to WKRR(FM) to 73,850 persons over 1,379 square kilometers. All populations are based upon the 2000 Census.

⁴ WKRR(FM) causes interference to the existing WXLK(FM) to 61,270 persons over 1,640 square kilometers. WKRR(FM) causes interference to the proposed WXLK(FM) to 54,450 persons over 1,603 square kilometers.

Radiofrequency Electromagnetic Field Exposure Analysis

A radiofrequency electromagnetic field measurement survey will be undertaken after construction and operation of WXLK(FM) at its new transmitter site. As this new transmitter site is the location of several FM radio stations, this survey will ensure that the ground level electromagnetic emissions due to the addition of WXLK(FM) to this transmitter site are below the Commission's guideline values in both the appropriate controlled and uncontrolled radiofrequency environments.⁵

Access to the transmitting site is restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines. WXLK(FM) will also coordinate with the other co-located users of the towers to reduce or shut down power when workers representing any station ascend the tower.

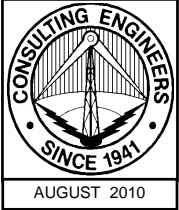
It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.

Charles A. Cooper

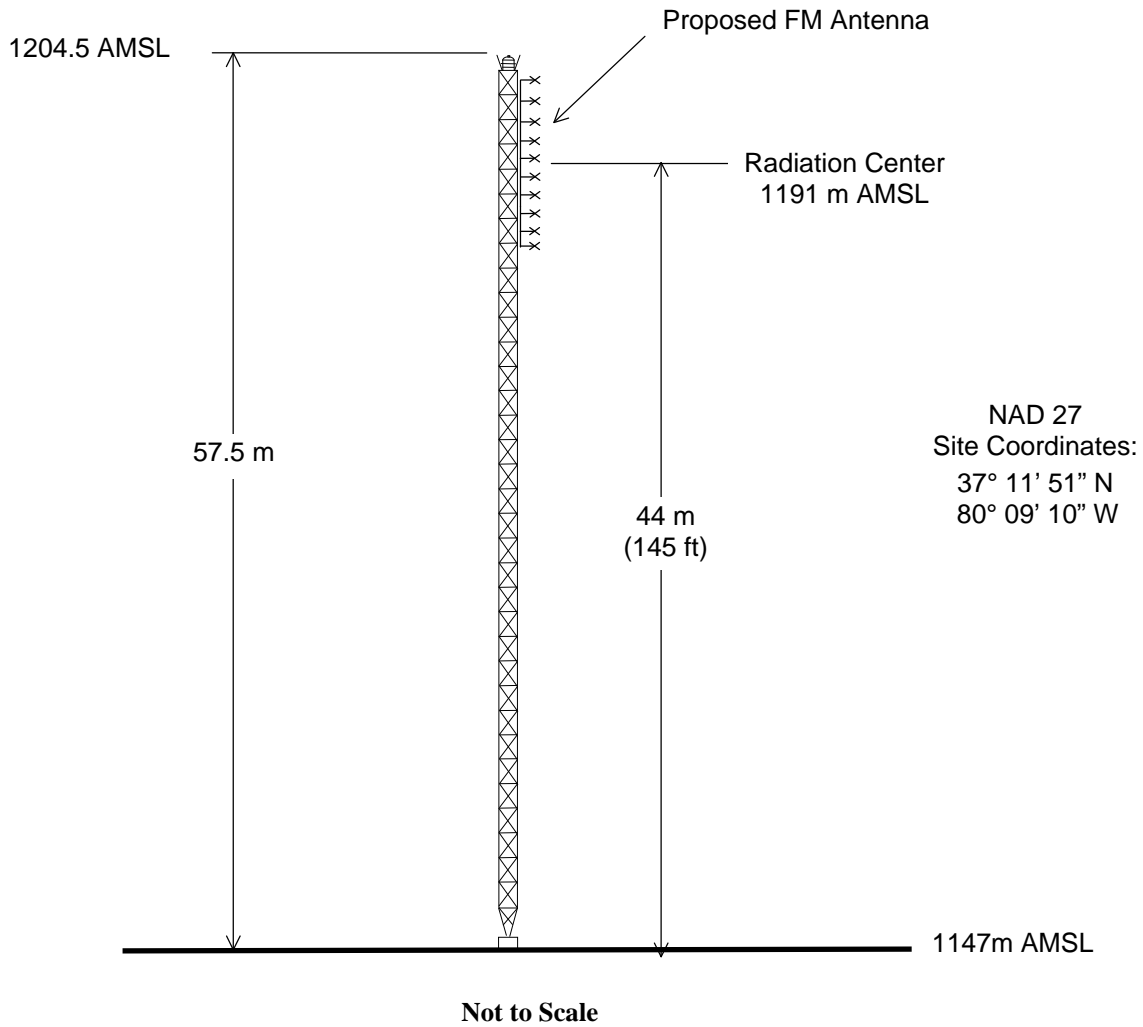
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000

August 25, 2010

⁵ This survey will be included within the application for license.



ASRN: 1024382



ANTENNA AND SUPPORTING STRUCTURE

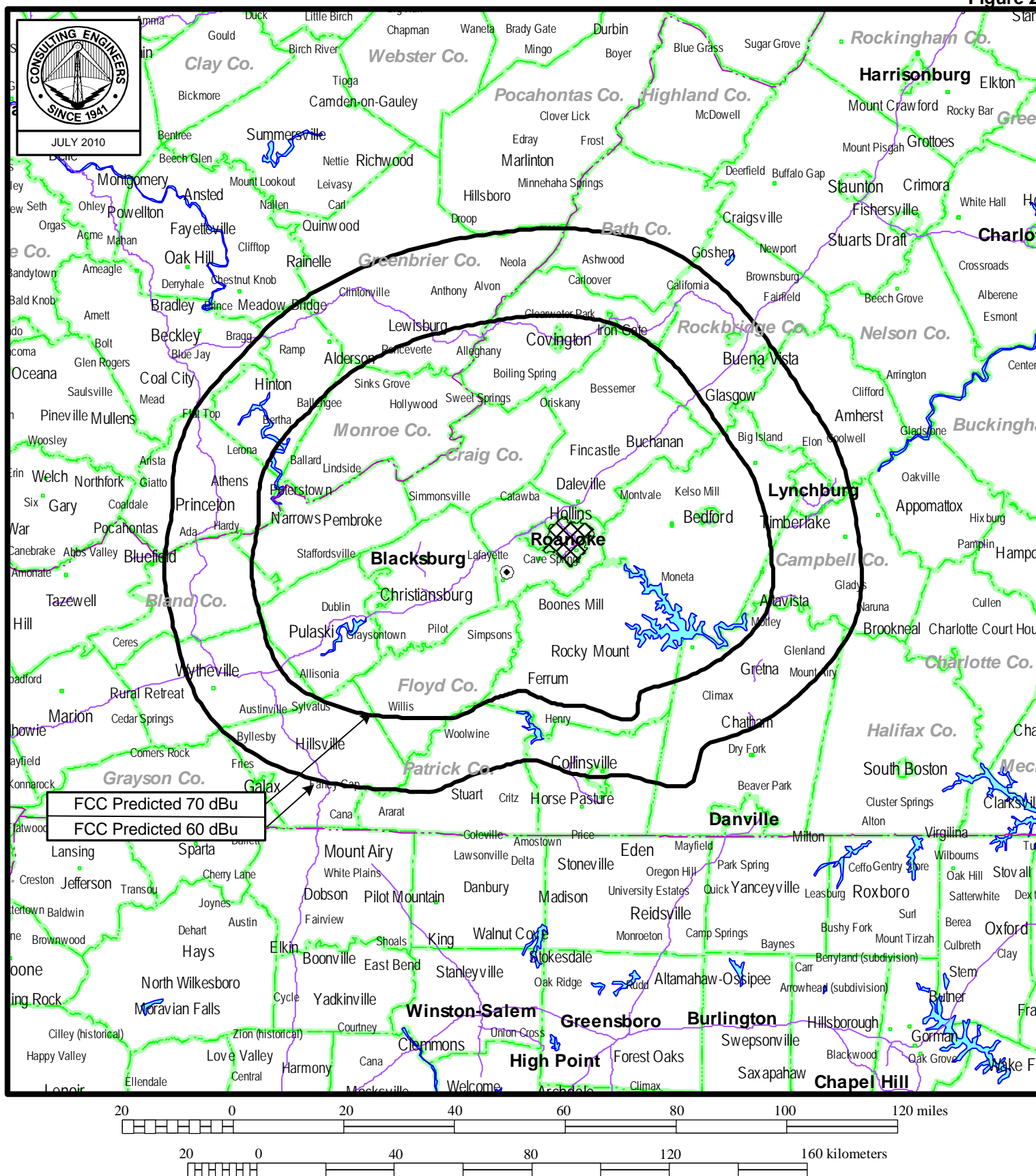
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



FCC PREDICTED COVERAGE CONTOURS

STATION WXLK(FM)

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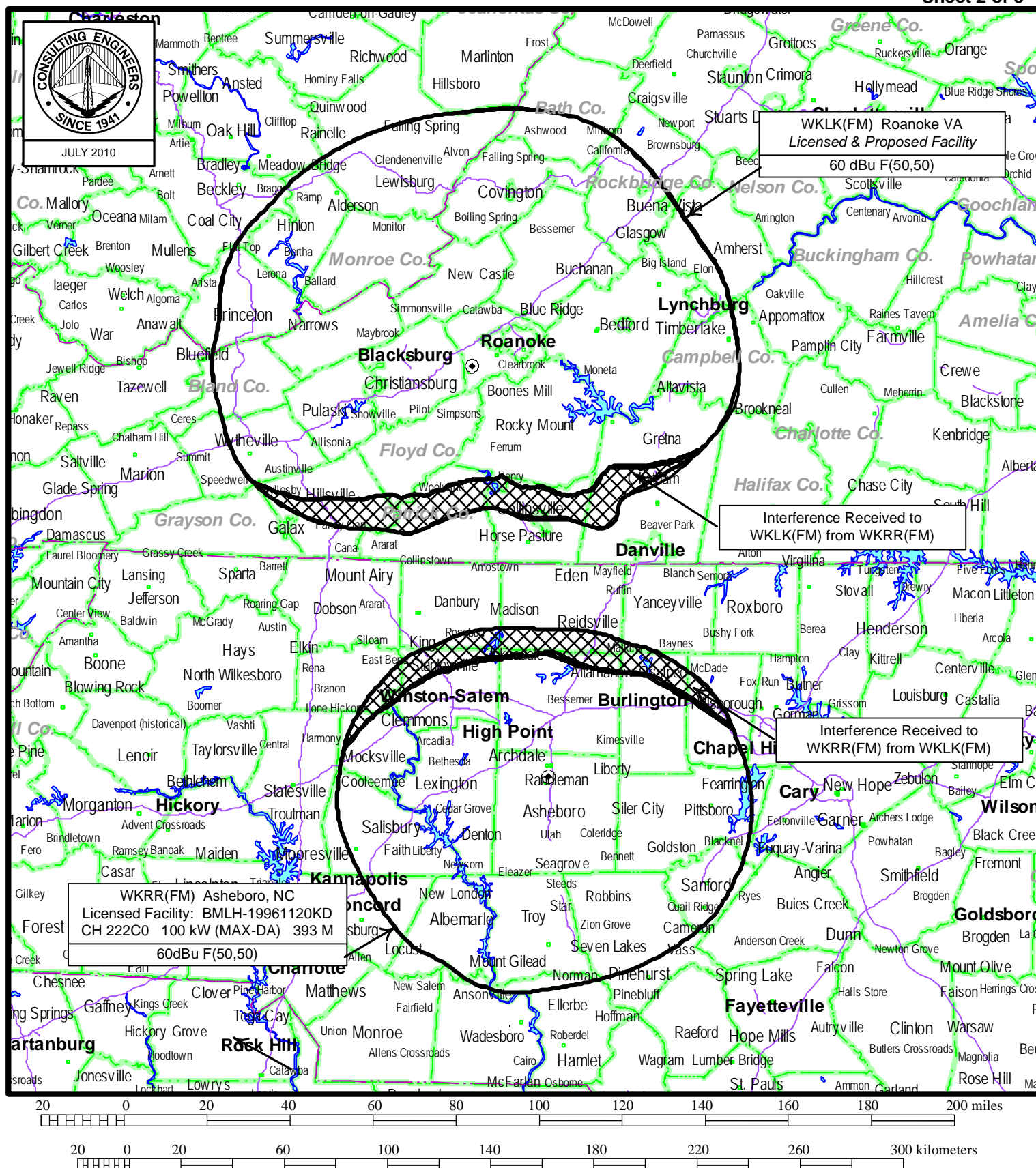
du Treil, Lundin & Rackley, Inc Sarasota, Florida

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Proposed Site Allocation Study

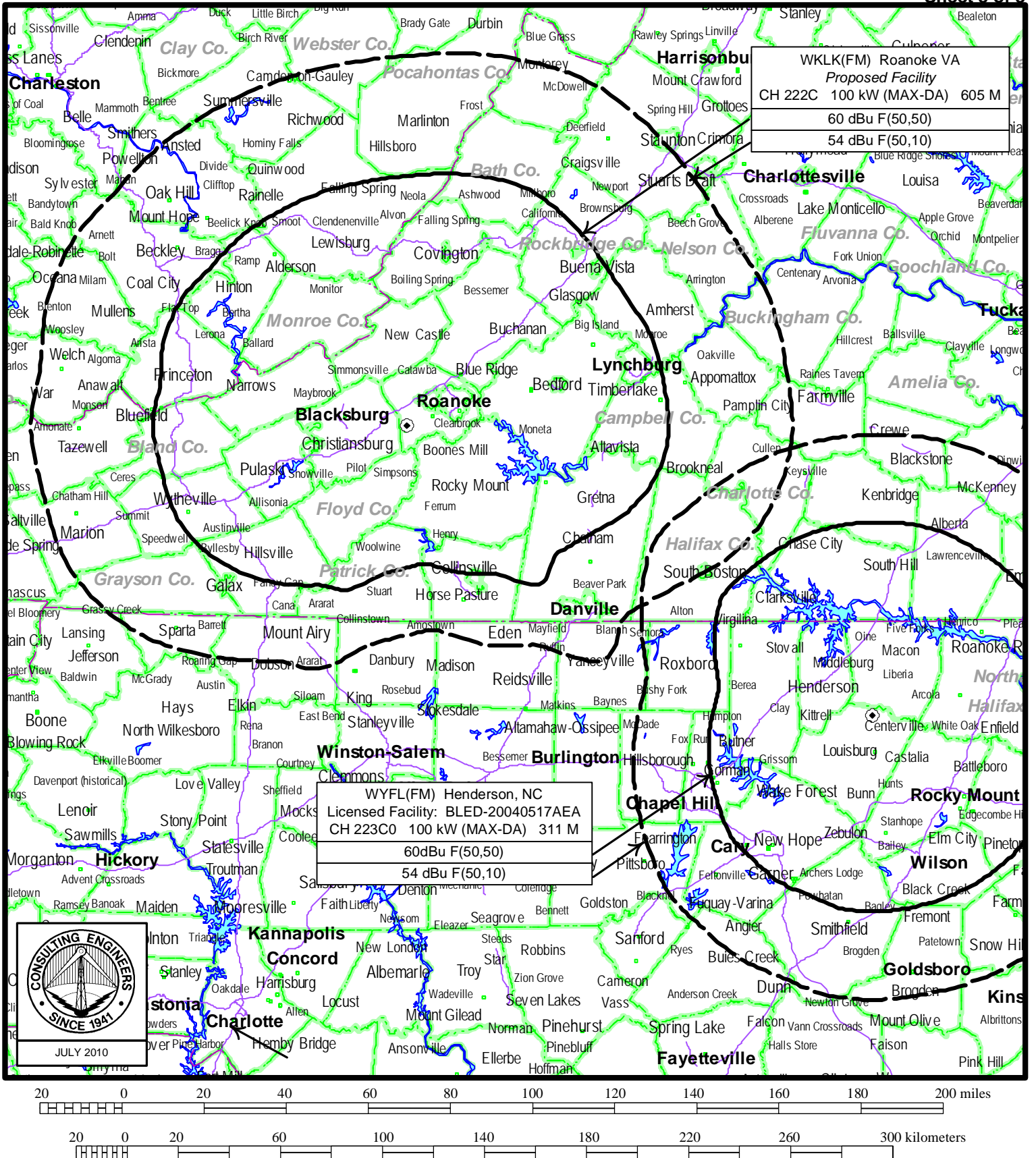
37° 11' 51" North Latitude
80° 09' 10" West Longitude

Callsign	Status	Chan.	Serv.	Freq.	City		State	Latitude	Dist.(km)	Sep.(km)	Spacing(km)
Fac. ID	ARN			Class	DA	Ant. ID	HAAT(m)	Longitude	Bear.(deg)	73.215	Comment
WWEM	LIC	219	FM	91.7	RUSTBURG		VA	037-17-07	94.75	95	-0.25
81316	BLD	20071210ABQ	A	N			228	079-05-26	83.75	89 N	
<i>(Separation distance rounds to 95 kilometers. No short-spacing.)</i>											
NEW	APP	220	FM	91.9	LYNCHBURG		VA	037-17-06	94.7	95	-0.3
176339	BNPD	20071018AUK	A	N			230	079-05-28	83.77	89 Y	
<i>(Separation distance rounds to 95 kilometers. No short-spacing.)</i>											
NEW	APP	220	FM	91.9	MILTON		NC	036-35-03	113.26	105	8.26
172962	BNPD	20071015AGV	C1	D	88066		84	079-08-14	126.75	99 N	
WVMR-FM	CP MOD	220	FM	91.9	HILLSBORO		WV	038-11-30	110.41	95	15.41
122123	BMPD	20100426ABL	A	D	99123		-10.7	080-11-44	358.06	89 N	
WXLK	LIC	222	FM	92.3	ROANOKE		VA	037-11-56	0.27	290	
9692	BLH	20050912ACD	C	D	64830		625	080-09-01	55.11	270 N	
<i>(Applicant's existing authorization)</i>											
WKRR	LIC	222	FM	92.3	ASHEBORO		NC	035-49-59	154.08	281	-126.92
16892	BMLH	19961120KD	C0	D	13673		393	079-50-02	169.27	270 N	
<i>(Section 73.213(a) processing requested.)</i>											
WYFL	LIC	223	FM	92.5	HENDERSON		NC	036-13-23	205.12	220	-14.88
5100	BLD	20040517AEA	C0	D	44326		311	078-12-07	121.34	207 N	
<i>(Continued waiver of Section 73.207 requested.)</i>											
WVJO	LIC	224	FM	92.7	MULLENS		WV	037-31-07	114.3	95	19.3
60598	BLH	20100625AWO	A	N			100	081-22-43	288.61	89 N	



WKRR(FM) ALLOCATION ANALYSIS

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WYFL(FM) ALLOCATION ANALYSIS

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