

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION WWNK
FARMVILLE, NORTH CAROLINA
CH 232A 3.9 KW 124 M

Technical Statement

This Technical Statement has been prepared on behalf of ABG North Carolina, LLC (ABG), licensee of FM station WWNK, channel 232A, Farmville, North Carolina (BLH-19860609KC) in support of an application for construction permit. Station WWNK presently operates with 1.95 kW effective radiated power (ERP) employing a 2-bay antenna with radiation center at a height above average terrain (HAAT) of 124 meters; this power/height combination is equivalent to the former Class A FM station maxima of 3 kW ERP at an HAAT of 100 meters (the maximum parameters permitted at the time WWNK was licensed). By means of this application, WWNK proposes to increase ERP to 3.9 kW, the Class A FM equivalent, maximum power under the present rules. No change in location, antenna, antenna height, or transmission line is proposed.

Allocation Situation

Station WWNK is fully-spaced under 47 CFR 73.207 to all other FM stations except to co-channel station WZKB, Wallace, North Carolina. Like WWNK, WZKB also operates as a Class A station pursuant to the former Class A maximum parameters; the separation distance between the transmitters sites of WWNK and WZKB meets the requirement of the FCC Rules that was in place at the time the stations were authorized. Thus, WWNK and WZKB have been operating as “grand-fathered, short-spaced stations” under 47 CFR 73.213 since the time the Commission increased the maximum, permissible Class A facilities and adopted the present spacing requirements in 1989.

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In cases involving Class A stations, such as WWNK and WZKB, the Commission permits a mutual upgrade to full Class A parameters if the stations are fully-spaced to all other FM stations, and if the two stations mutually agree to the upgrade. Until recently, a mutual upgrade was not possible because WZKB was also short-spaced under 47 CFR 73.207 to first adjacent channel station WKXS-FM, channel 231A, Leland, North Carolina. However, WKXS-FM has just recently filed an application for license under 47 CFR 73.215 and now protects WZKB as a full-facility Class A FM station. Therefore, both WWNK and WZKB are now fully spaced to all other FM stations and allotments.

Figure 1, attached, is an allocation study for WWNK. Figure 2, attached, is an allocation study for WZKB. As can be seen from these two studies, both WWNK and WZKB meet the Commission's requirements for a mutual upgrade to full Class A operating parameters pursuant to 47 CFR 73.213(c)(2).¹ Figure 3 is a coverage map for the proposed WWNK demonstrating that the proposed facility meets the city coverage requirements of 47 CFR 73.315. It is understood that station WZKB will soon be filing an application for upgrade of its facilities.

Environmental Considerations

The proposed facility was evaluated in terms of potential radiofrequency radiation (RFR) exposure at 2 meters above ground level in accordance with OST Bulletin No. 65, (Edition 97-01, August 1997), "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." The calculated radio-frequency radiation power density due to the proposed WWNK facility was determined using Equation (8) on page 22 of this bulletin. Based on the vertical radiation pattern for the antenna, the antenna relative field in the downward direction is 0.55 or less at all angles greater than 20° below the horizontal.² Using this relative field

¹ It is understood that WZKB is filing a correction in site coordinates. Sheet 1 of Figure 2 is an allocation study for WZKB from its original coordinates; Sheet 2 of Figure 2 is an allocation study from the corrected coordinates.

² See the attached Appendix for the ERI FML-2E antenna vertical radiation pattern.

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value and a combined ERP of 7.8 kW (3.9 kW horizontal and 3.9 kW vertical) the calculated RF power density at 2.0 meters above ground level at the tower base is 0.0059 mW/cm², which is less than 3.0 percent of the FCC limit for an uncontrolled environment. RFR warning sign(s) shall be in place at the tower base. The applicant verifies that appropriate measures will be taken to assure that workers or other authorized personnel granted access to the tower structure will not be exposed to radiofrequency radiation in excess of the FCC guidelines, and that these measures will be coordinated with all other users of the site.

With respect to human exposure to radiofrequency radiation, the proposal is categorically excluded from environmental processing as it is predicted to be within the standards specified in 47 CFR 1.1307(b). The proposal does not involve development of a new site, but rather involves use of an existing radio broadcast site. It is noted that this technical exhibit 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 as part of the antenna structure registration process.

David E. Dickmann
Technical Consultant

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

April 11, 2006

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Allocation Study for WWNK

Job Title: WWNK
Channel: 232 A

Separation Buffer: 32 km
Coordinates: 353625 0772805

Call Id	City St	Status	File Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km)
WRSN 53596	CARY NC	CP	C 20051003BFZ	BPH 230 C 93.9	100.000 453	Y 71375	35-42-50 078-49-04	Y	276.0	122.79	95.0
WWHA 13651	ORIENTAL NC	LIC	C 19930326KA	BLH 231 C3 94.1	11.000 148	N	35-00-02 076-49-58	N	139.3	88.68	89.0*
WZKB 31119	WALLACE NC	LIC	C 19920601KE	BMLH 232 A 94.3	3.300 90	N	34-45-29 078-00-00	N	207.3	105.91	115.0**
WJIJ 1208	NORLINA NC	LIC	C 20010913AAW	BLED 232 A 94.3	6.000 100	N	36-29-38 078-11-23	N	326.9	117.96	115.0
WCMS-FMHATTERAS 83211	NC	LIC	C 20040610AAV	BMLH 233 C1 94.5	100.000 299	Y 15053	35-29-10 075-59-58	Y	95.3	133.85	133.0
WQDR 9076	RALEIGH NC	LIC	C 19910411KB	BLH 234 C 94.7	100.000 512	N	35-40-35 078-32-09	N	274.9	97.02	95.0

*Rounds to 89 km.

**Meets separation requirements of former FCC Rules. Mutual upgrade with WZKB proposed by this application; see Technical Narrative.

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Allocation Study for WZKB

Job Title: WZKB
Channel: 232 A

Separation Buffer: 32 km
Coordinates: 344529 0780000

Call Id	City St	Status	File Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km)
WBNE 73954	TOPSAIL NC	BEA APP C	BPH 20060228AAO	229 C3 93.7	11.000 151.8	N	34-25-04 077-43-21	Y	146.0	45.53	42.0
0	TOPSAIL NC	BEA ADD C	RM 11295	229 C3 93.7	0.000		34-25-37 077-38-33		138.3	49.24	42.0
0	TOPSAIL NC	BEA ADD C	RM 11143	229 C3 93.7	0.000		34-25-37 077-38-33		138.3	49.24	42.0
WBNE 73954	WRIGHTSVILL NC	BLH LIC C	20001215AAO	229 A 93.7	6.000 100	N	34-18-04 077-48-07	Y	160.3	53.85	31.0
WKXS-FM 25998	LELAND NC	BMLH LIC C	20011012ABC	231 A 94.1	5.000 41	N	34-09-03 078-04-48	N	186.2	67.76	72.0*
WWHA 13651	ORIENTAL NC	BLH LIC C	19930326KA	231 C3 94.1	11.000 148	N	35-00-02 076-49-58	N	75.5	110.05	89.0
WWNK 26020	FARMVILLE NC	BLH LIC C	19860609KC	232 A 94.3	1.950 124	N	35-36-25 077-28-05	N	27.0	105.91	115.0**
WCMG 72929	LATTA SC	BLH LIC C	19971113KB	232 C3 94.3	10.500 153	N	34-26-20 079-29-44	N	255.9	141.69	142.0***
WKXS-FM 25998	LELAND NC	BMPH CP C	20051011AKY	233 A 94.5	3.800 126.7	Y 70970	34-12-35 077-56-53	Y	175.5	61.01	72.0*
WQDR 9076	RALEIGH NC	BLH LIC C	19910411KB	234 C 94.7	100.000 512	N	35-40-35 078-32-09	N	334.7	112.96	95.0

*WKXS-FM has a license application (to cover BMPH-20051011AKY) on file. WKXS-FM protects WZKB as a fully-spaced Class A station.

**Meets separation requirements of former FCC Rules. Mutual upgrade with WWNK proposed by this application; see Technical Narrative.

***Separation distance rounds to 142 km.

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Allocation Study for WZKB at Corrected Coordinates

Job Title: WZKB CORRECTED
Channel: 232 A

Separation Buffer: 32 km
Coordinates: 344530 0775952

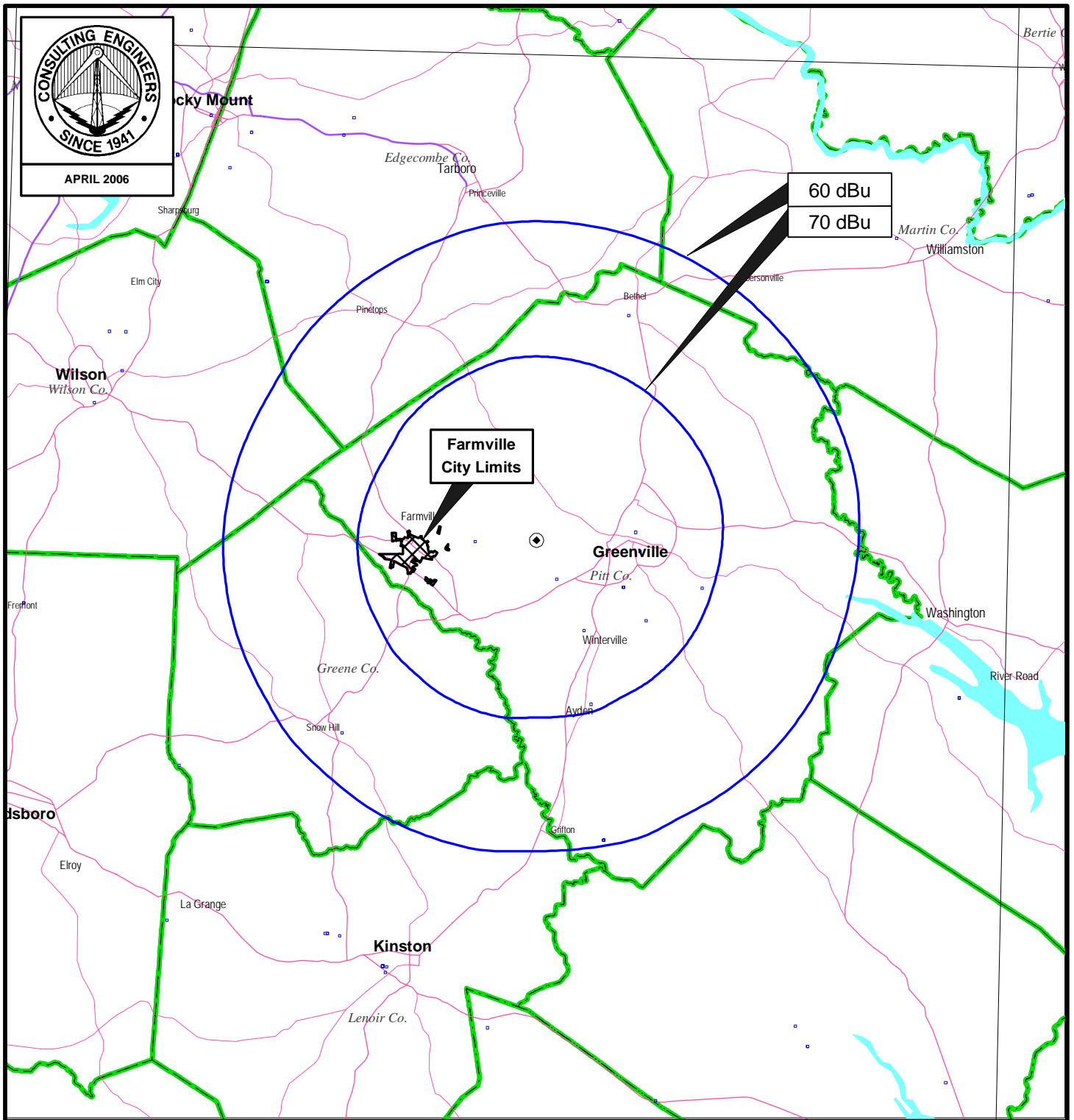
Call Id	City St	File Status	Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. (km)
WBNE 73954	TOPSAIL NC	BEA APP	BPH C 20060228	229 93.7	C3 151.8	N	34-25-04 077-43-21	Y	146.3	45.44	42.0
0	TOPSAIL NC	BEA ADD	RM C 11143	229 93.7	C3 0.000		34-25-37 077-38-33		138.5	49.13	42.0
0	TOPSAIL NC	BEA ADD	RM C 11295	229 93.7	C3 0.000		34-25-37 077-38-33		138.5	49.13	42.0
WBNE 73954	WRIGHTSVILL NC	BLH LIC	C 20001215	229 93.7	A 100	N	34-18-04 077-48-07	Y	160.5	53.81	31.0
WKXS-FMLELAND 25998		BMLH LIC	C 20011012	231 94.1	A 41	N	34-09-03 078-04-48	N	186.4	67.81	72.0*
WWHA 13651	ORIENTAL NC	BLH LIC	C 19930326	231 94.1	C3 148	N	35-00-02 076-49-58	N	75.4	109.85	89.0
WWNK 26020	FARMVILLE NC	BLH LIC	C 19860609	232 94.3	A 124	N	35-36-25 077-28-05	N	26.9	105.79	115.0**
WCMG 72929	LATTA SC	BLH LIC	C 19971113	232 94.3	C3 153	N	34-26-20 079-29-44	N	255.9	141.89	142.0***
WKXS-FMLELAND 25998		BMPH CP	C 20051011	233 94.5	A 126.7	Y 70970	34-12-35 077-56-53	Y	175.7	61.03	72.0*
WQDR 9076	RALEIGH NC	BLH LIC	C 19910411	234 94.7	C 512	N	35-40-35 078-32-09	N	334.6	113.02	95.0

*WKXS-FM has a license application (to cover BMPH-20051011AKY) on file. WKXS-FM protects WZKB as a fully-spaced Class A station.

**Meets separation requirements of former FCC Rules. Mutual upgrade with WWNK proposed by this application; see Technical Narrative.

***Separation distance rounds to 142 km.

Figure 3



PROPOSED COVERAGE CONTOURS

FM STATION WWNK
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

APPENDIX – ANTENNA VERTICAL RADIATION PATTERN
(one page follows)

ELECTRONICS RESEARCH, INC.
108 MARKET STREET
NEWBURGH, IN. 47630

FIGURE F2

-----THEORETICAL-----
VERTICAL PLANE RELATIVE FIELD

2 ERI TYPE SHP, SHPX, LP, OR LPX ELEMENTS
0 DEGREE(S) BEAM TILT
0 PERCENT FIRST NULL FILL

MAY 24, 1993
ELEMENT SPACING:
1.0 WAVELENGTH

POWER GAIN IS .997 IN THE HORIZONTAL PLANE(.997 IN THE MAX.)

