

**APPLICATION FOR STATION LICENSE/
REQUEST FOR PROGRAM TEST AUTHORITY
LAKE RADIO, INC.
WLKQ (FM) RADIO STATION
CH 272A - 102.3 MHZ - 4.2 KW (DA)
BUFORD, GEORGIA
April 2003**

EXHIBIT #A

WLKQ Transmission System Calculations

Effective Radiated Power:

Horizontal	4.2 kilowatts
Vertical	4.2 kilowatts ²

Antennas:

Shively Labs 6810-2-SS-DA
2 bay half wavelength
Horizontal gain 1.180

Transmission Line:
(328 feet)

Cablewave HCC 158-50J
1 5/8 inch air dielectric
85.4% Efficiency

Required Transmitter Power Output
To Reach Effective Radiated Power:

4.167 kilowatts

Facilities Authorized:

Channel 272A - 102.3 MHz

Effective Radiated Power:

4.2 kilowatts (H/V)

Geographic Coordinates:

North Latitude	34° 07' 16"
West Longitude	83° 58' 35"

Antenna Center of Radiation:

Above Ground	98.0 meters
Above MSL	452.0 meters
HAAT	119.0 meters

Antenna Structure Registration No:

1211381

2) Based on the vertical polarization power gain of the system, the vertical effective radiated power was calculated at 4.16 kilowatts, which was rounded to 4.2 kilowatts.

APPLICATION FOR STATION LICENSE/

with the Federal Communications Commission, Bureau of Station Licensing, pursuant to
REQUEST FOR PROGRAM TEST AUTHORITY

§73.215 of the Federal Communications Commission Rules and Regulations, and the conditions with the
AFFIDAVIT OF NON-INTERFERENCE BY A CONSULTANT

WLKQ's specific application for the 27.2 MHz FM station license, (the program test authority) Surveyor
BUFORD, GEORGIA

that the antenna is oriented at 238° true. April 2003

State of Georgia)

St. Simons Island) ss:

County of Glynn)

EXHIBIT #A

TECHNICAL STATEMENT

Condition 6 requires WLKQ Transmitter System Calculations to verify the construction

This Statement was prepared on behalf of Lake Radio, Inc. ("Lake"), licensee of radio
of the WLKQ facilities did not have an adverse impact on the operation of AM station WXEM,
station WLKQ, Channel 27.2, Buford, Georgia. Lake holds an outstanding construction permit
1460 kHz, Buford, Georgia. The condition required 4.2 kilowatts on eight radials to show

JEFFERSON G. BROCK, being duly sworn, deposes and says that he is an officer of
Graham Brock, Inc. Graham Brock has been engaged by Lake Radio, Inc. to prepare the
the WLKQ system was not impacted. As detailed in the application that resulted in the WLKQ
application seeks a license to cover this outstanding construction permit. Further, since the

permit (BPEH20000303ACG), the WLKQ antenna is Shively Labs 68' WXEM tower. The
His qualifications are a matter of record before the Federal Communications Commission.
He has been active in Broadcast Engineering since 1978.

The attached WLKQ coordinates as indicated in the permit. In fact, Lake corrected the
permit. Antenna coordinates are believed to be true and correct. HW 158-501 for WLKQ.
coordinates of the WLKQ tower in the underlying permit inch air dielectric

This the 14th day of April, 2003. 85.4% Efficiency

There were seven conditions placed on the WLKQ permit. The first condition requires
Required WLKQ is to be a Power Output system was also on the WXEM tower, there was little, if
the power of the Effective Radiated Power ceased to be less than that persons having access to
any, impact on the WXEM system as a result of the antenna change for WLKQ. The same
the site are not exposed to radio frequency electromagnetic fields in excess of the FCC
antenna Facilities Authorized for the new WLKQ system Jefferson G. Brock, 27.2 MHz
guidelines. Lake herein restates that it will lower the power of WLKQ or cease operation, as
that could impact WLKQ. Therefore, no pre- or post- construction field measurements were taken.
necessary, to ensure no one is exposed to fields in excess of the FCC limits.

The WXEM antenna has been checked for a change in impedance 348.07 166
West Longitude 83° 58' 35"

update that data and correct the geographic coordinates of the WXEM facility is being prepared

Antenna Center of Radiation to the use of a directional antenna 98' WLKQ. Attached
by the licensee of that station. It will be submitted to the FCC on a timely basis.

as Exhibit B is an antenna proof of performance from Shively Labs ("Shively") the
the data for the WXEM system is filed, Lake will notify the Commission.

manufacture of the WLKQ system, demonstrating the compliance of the antenna system

Notary Public, State of Georgia

My Commission Expires: April 16, 2006

- 1) Based on the sectional polarization in the Natchez system, the theoretical efficiency of the WLKQ antenna was
calculated at 4.16 kilowatts, which was rounded to 4.2 kilowatts.