

ENGINEERING REPORT

PROPOSED WKCR-FM  
CHANNEL 210B1  
NEW YORK, NEW YORK

MARCH, 2002

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FCC Form 340, Section V-B

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of THE TRUSTEES OF COLUMBIA UNIVERSITY in the City of New York, licensee of Noncommercial Station WKCR-FM, Channel 210B1, New York, New York, in support of its Application for Construction Permit to change site, ERP, and antenna height.

It is proposed to mount a new antenna on the Riverside Church, as shown in Exhibit B. Exhibit C shows the licensed and proposed 60 db $\mu$  service contours, and Exhibit D is an allocation study. A TV Channel 6 interference study is included as Exhibit E. It is not anticipated that the proposed operation would cause interference to any authorized broadcast station, but if such interference were to result, WKCR-FM accepts its responsibility to correct the problem.

It should be noted that the WKCR-FM antenna is to be mounted on an existing pole atop the church. Thus, since no change in the overall height of the church is proposed, the FAA has not been advised of this proposal.

We have studied the RF transmissions of this facility with regard to their environmental effect. Employing the methods set forth in *OET Bulletin No. 65*, and considering the vertical pattern of a typical four-bay antenna, we calculate the maximum power density two meters above ground from the proposed facility to be 0.0032 mw/cm<sup>2</sup> at points approximately 55 meters south of the tower base. This is only 1.6 percent of the 0.2 mw/cm<sup>2</sup> reference in uncontrolled environments (*i.e.*, areas which have public access) surrounding an FM facility, and therefore can be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

EXHIBIT A

be exposed to excessive levels of radio frequency energy. Therefore, a grant of this proposed facility can be considered a minor environmental action with respect to occupational exposure to nonionizing electromagnetic radiation.

I declare under penalty of perjury that the foregoing statements and the attached Engineering Report, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in black ink, consisting of a stylized 'N' followed by a horizontal line that tapers to the right.

NEIL M. SMITH

March 13, 2002