

**Measurement Report – W D C C (FM) Tower Site
Sanford, North Carolina
Prepared for Central Carolina Community College
Prepared by: James W. Davis, PhD
July 30, 2003**

I, James W. Davis, contract engineer for radio station WDCC, made measurements at the WDCC transmitter/studio site on July 30, 2003 to ascertain the level of compliance for the tower site with Maximum Permissible Exposure levels for occupational controlled and non-controlled public access to the site and it's surroundings.

The tower on which the WDCC antenna is mounted on is comparatively short and is located immediately adjacent to a school building and parking lot. The station antenna effective radiated power is 3 kW horizontal polarization and 3 kW vertical polarization. Evaluation of RF radiation for the purposes of license renewal using the renewal form worksheets and by calculations using the methods outlined in OET Bulletin 65 resulted in exposure levels for occupational controlled exposure of over the 1 mW/cm^2 limit as well as over the 0.2 mW/cm^2 for uncontrolled public access at both ground level in the parking lot area and on the roof of the building outside designated "do not enter" areas.

I determined that measurements should be made to ascertain the level of RF power per unit area at the site. Measurements were made using a Wandel & Goltermann (Narda) EMR-20 EM radiation monitor, serial number BN 2440/20 with accompanying E field probe type 08.2. This instrument and probe measure E field intensity over the frequency range of 300 kHz to 3 GHz with an isotropic probe. Minimum detectable power levels are 0.0001 mW/cm^2 . Since the distance to all radiators was greater than three wavelengths, the E field measurement was directly expressible in terms of power per unit area, and can be expressed in mW/cm^2 on the instrument. The FM transmitter was checked for power output within FCC limits. Levels of 1 mW/cm^2 per occupational controlled exposure and 0.2 mW/cm^2 for uncontrolled public exposure were used since the only expected radiation is at the station frequency of 90.5 MHz. The measuring instrument was used following the manufacturer's instructions and good engineering practice.

Measurements were made in both sample mode and peak hold mode within the school building adjacent to the antenna, within the fence and blockaded area surrounding the tower base, outside the perimeter of the tower fence/blockades, at each guy point, and on the roof. Measurements were made slowly sweeping the probe from ground level to a height of 2 meters. This procedure was executed during the time period of 2pm to 4pm.

The maximum observed power per unit within the fenced/blockaded area and on the roof was 0.575 mW/cm^2 , which is within the controlled occupational maximum permissible exposure level. Most of these areas were significantly below this level. There are two areas on the roof which are outlined in paint which mark "hot spot" areas around the tower base, the transmission lines, and a guy anchor. These areas are designated as "transmitter off" entry areas.

The maximum observed power per unit area within most of the school building areas surveyed was 0.038 mW/cm², well below the uncontrolled public exposure limit of 0.2 mW/cm². There was one “hot spot” area within the transmitter room immediately above the through-wall air conditioning unit which registered 0.38 mW/cm², but this area is a controlled exposure/occupational areas by designation.

Outside the fence/blockade area outside the building, power per unit area readings were below 0.2 mW/cm². Readings approach the limit in small areas due to ground reflection but do not exceed the limit.

On the basis of these measurements I conclude that the WDCC facilities are in compliance with the current FCC rules regarding human exposure to RF radiation at ground level and on the roof of the school building in the areas defined for uncontrolled/public and controlled/occupational access.

I declare that the contents of this report are true and accurate to the best of my knowledge and belief. I hold Bachelor’s and Master’s Degrees in Electrical Engineering and an Doctor of Philosophy Degree in Biomedical Engineering from Duke University and have been employed in technical aspects of the broadcasting industry since 1965. I have been associated with WDCC and Central Carolina Community College since 1997.

_____ Date _____

James W. Davis, PhD
James W. Davis Consultant Inc.

Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3060-0084 (June 2002)

FOR FCC USE ONLY

FCC 323-E

**Ownership Report For Noncommercial
Educational Broadcast Station**

FOR COMMISSION USE ONLY
FILE NO.

Read [INSTRUCTIONS](#) Before Filling Out Form

Section I - General

1. Legal Name of the Licensee/Permittee CENTRAL CAROLINA COMMUNITY COLLEGE		
Mailing Address 1105 KELLY DR.		
City SANFORD	State or Country (if foreign address) NC	ZIP Code 27330 - 9059
Telephone Number (include area code) 9197187257	E-Mail Address (if available) BFREEMAN@CCCC.EDU	
FCC Registration Number: 0009659731	Call Sign WDCC	Facility ID Number 9841
2. Contact Representative (if other than Licensee/Permittee) BILL FREEMAN		
Firm or Company Name CENTRAL CAROLINA COMMUNITY COLLEGE		
Telephone Number (include area code) 9197187257	E-Mail Address (if available) BFREEMAN@CCCC.EDU	
3. Name of entity, if other than licensee or permittee, for which report is filed		
Mailing Address		
City	State or Country (if foreign address)	ZIP Code -
Telephone Number (include area code)	E-Mail Address (if available)	

Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3050-0110 (March 2003)

FOR FCC USE ONLY

FCC 303-S

APPLICATION FOR RENEWAL OF BROADCAST STATION LICENSE

FOR COMMISSION USE ONLY
FILE NO.

Read [INSTRUCTIONS](#) Before Filling Out Form

Section I - General Information- TO BE COMPLETED BY ALL APPLICANTS

1. Legal Name of the Applicant CENTRAL CAROLINA COMMUNITY COLLEGE		
Mailing Address 1105 KELLY DR.		
City SANFORD	State or Country (if foreign address) NC	ZIP Code 27330 - 9059
Telephone Number (include area code) 9197187257	E-Mail Address (if available) BFREEMAN@CCCC.EDU	
FCC Registration Number: 0009659731	Call Sign WDCC	Facility Identifier 9841
2. Contact Representative (if other than Applicant) BILL FREEMAN		Firm or Company Name CENTRAL CAROLINA COMMUNITY COLLEGE
Telephone Number (include area code) 9197187257		E-Mail Address (if available) BFREEMAN@CCCC.EDU
3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114): <input type="radio"/> Governmental Entity <input checked="" type="radio"/> Noncommercial Educational Licensee <input type="radio"/> Other		
4. Purpose of Application <input checked="" type="radio"/> Renewal of license <input type="radio"/> Amendment to pending renewal application If an amendment, submit as an exhibit a listing by Section and Item Number the portions of the pending application that are being revised.		
5. Facility Information: <input type="radio"/> Commercial <input checked="" type="radio"/> Noncommercial Educational		
6. Service and Community of License a. <input type="radio"/> AM <input checked="" type="radio"/> FM <input type="radio"/> TV <input type="radio"/> FM Translator <input type="radio"/> LPFM		

TV Translator Low Power TV Class A TV

Community of License /Area to be Served

City: SANFORD

State : NC

- b. Does this application include one or more FM translator station(s), or TV translator station(s), LPTV station(s), in addition to the station listed in Section I question 1? (The callsign(s) of any associated FM translators, TV translators or LPTVs will be requested in Section V). Yes No

7. **Other Authorizations.** List call signs, facility identifiers and location(s) of any FM booster or TV booster station(s) for which renewal of license is also requested.

NOTE: In addition to the information called for in Sections II, III, IV and V, an explanatory exhibit providing full particulars must be submitted for each item for which a "No" response is provided.

Section II - Legal - TO BE COMPLETED BY ALL APPLICANTS

- | | |
|---|---|
| <p>1. Certification. Licensee certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Licensee further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application, instructions and worksheets.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| <p>2. Character Issues. Licensee certifies that the neither the licensee nor any party to the application has or has had any interest in, or connection with:</p> <p>a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or</p> <p>b. any pending broadcast application in which character issues have been raised.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No
See Explanation in</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No
See Explanation in</p> |
| <p>3. Adverse Findings. Licensee certifies that, with respect to the licensee and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any laws related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No
See Explanation in</p> |
| <p>4. FCC Violations during the Preceding License Term. Licensee certifies that, with respect to the station(s) for which renewal is requested, there have been no violations by the licensee of the Communications Act of 1934, as amended, or the rules or regulations of the Commission during the preceding license term. If No, the licensee must submit an explanatory exhibit providing complete descriptions of all violations.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No
See Explanation in</p> |
| <p>5. Alien Ownership and Control. Licensee certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No
See Explanation in</p> |

6. **Anti-Drug Abuse Act Certification.** Licensee certifies that neither licensee nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

Yes No

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing
BILL FREEMAN

Typed or Printed Title of Person Signing
BILL FREEMAN

Signature

Date
07/21/2003

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

Section III - TO BE COMPLETED BY AM and FM LICENSEES ONLY

1. **Biennial Ownership Report:** Licensee certifies that the station's Biennial Ownership Report (FCC Form 323 or 323-E) has been filed with the Commission as required by 47 C.F.R. Section 73.3615.

Yes No

See Explanation in

2. **EEO Program:** Licensee certifies that:

a. The station's Broadcast EEO Program Report (FCC Form 396) has been filed with the Commission, as required by 47 C.F.R. Section 73.2080(f)(1).

Yes No

See Explanation in

Specify FCC Form 396 File Number : -

b. The station has posted its most recent Broadcast EEO Public File Report on the station's website, as required by 47 C.F.R. Section 73.2080(c)(6).

Yes No
 N/A

See Explanation in

3. **Local Public File.** Licensee certifies that the documentation, required by 47 C.F.R. Section 73.3526 or 73.3527, as applicable, has been placed in the station's public inspection file at the appropriate times.

Yes No

See Explanation in

4. **Discontinued Operations.** Licensee certifies that during the preceding license term, the station has not been silent for any consecutive 12-month period.

Yes No

See Explanation in

<p>5. Silent Station Licensee certifies that the station is currently on the air broadcasting programming intended to be received by the public.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
<p>6. Environmental Effects. Licensee certifies that the specified facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (<i>i.e.</i>, the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the licensee can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p> <p>By checking "Yes" above, the licensee also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in</p>

Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3050-0113 (March 2003)

FOR FCC USE ONLY

FCC 396

**BROADCAST EQUAL EMPLOYMENT
OPPORTUNITY PROGRAM REPORT**
(To be filed with broadcast license renewal application)

FOR COMMISSION USE ONLY
FILE NO.

Read [INSTRUCTIONS](#) Before Filling Out Form

Section I

Legal Name of the Licensee
CENTRAL CAROLINA COMMUNITY COLLEGE

Mailing Address
1105 KELLY DR.

City
SANFORD

State or Country (if foreign address) Zip Code
NC 27330 - 9059

Telephone Number (include area code)
9197187257

E-Mail Address (if available)
BFREEMAN@CCCC.EDU

Facility ID Number
9841

Call Sign
WDCC

**TYPE OF
BROADCAST
STATION:**
(if applicable)

Commercial Broadcast Station
 Radio
 TV
 Low Power TV
 International

Noncommercial Broadcast Station
 Educational Radio
 Educational TV

Application Purpose

- New Program Report
 Amendment to Program Report

List call sign and location of all stations included on this statement. List commonly owned stations that share one or more employees. Also list stations operated by the licensee pursuant to a time brokerage agreement. Indicate on the table below which stations are operated pursuant to a time brokerage agreement. To the extent that licensees include stations operated pursuant to a time brokerage agreement on this report, responses or information provided in Sections I through II should take into consideration the licensee's EEO compliance efforts at brokered stations, as well as any other stations, included on this form. For purposes of this form, a station employment unit is a station or a group of commonly owned stations in the same market that share at least one employee.

CONTACT PERSON IF OTHER THAN LICENSEE

Name BILL FREEMAN			Street Address 1105 KELLY DR.
City SANFORD	State NC	Zip Code 27330-9059	Telephone Number 9197187257

FILING INSTRUCTIONS

Broadcast station licensees are required to afford equal employment opportunity to all qualified persons and to refrain from discriminating in employment and related benefits on the basis of race, color, national origin, religion, and sex. See 47 C.F.R. Section 73.2080. Pursuant to these requirements, a license renewal applicant whose station employment unit employs five or more full-time station employees must file a report of its activities to ensure equal employment opportunity. If a station employment unit employs fewer than five full-time employees, no equal employment opportunity program information need be filed. If a station employment unit is filing a combined report, a copy of the report must be filed with each station's renewal application.

A copy of this report must be kept in the station's public file. These actions are required to obtain license renewal. Failure to meet these requirements may result in sanctions or license renewal being delayed or denied. These requirements are contained in 47 C.F.R. Section 73.2080 and are authorized by the Communications Act of 1934, as amended.

DISCRIMINATION COMPLAINTS. Have any pending or resolved complaints been filed during this license term before any body having competent jurisdiction under federal, state, territorial or local law, alleging unlawful discrimination in the employment practices of the station(s)? Yes No

If so, provide a brief description of the complaint(s), including the persons involved, the date of the filing, the court or agency, the file number (if any), and the disposition or current status of the matter.

Does your station employment unit employ fewer than five full-time employees? Yes No

Consider as "full-time" employees all those permanently working 30 or more hours a week.

If your station employment unit employs fewer than five full-time employees, complete the certification below, return the form to the FCC, and place a copy in your station(s) public file. You do not have to complete the rest of this form. If your station employment unit employs five or more full-time employees, you must complete all of this form and follow all instructions.

CERTIFICATION. This report must be certified, as follows:

- A. By licensee, if an individual;
- B. By a partner, if a partnership (general partner, if a limited partnership);
- C. By an officer, if a corporation or an association; or
- D. By an attorney of the licensee, in case of physical disability or absence from the United States of the licensee.

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47,

I certify to the best of my knowledge, information and belief, all statements contained in this report are true and correct.

Signed _____

Name of Respondent
BILL FREEMAN

Title
GENERAL MANAGER

Telephone No. (include area code)
919718725

Date
7/21/2003
