

**APPLICATION
FOR A
MINOR AMENDMENT
TO A PENDING APPLICATION
FCC FORM 301**

**(REQUESTING CONSIDERATION UNDER §73.215)
(LONGLEY-RICE METHOD)
(DIRECTIONAL ANTENNA)**

Facility Identification Number 11653

WFSF

Marion, South Carolina

CHANNEL 263C3 – 100.5 MHz

ERP: 25.0 kW (H&V)

HAAT: 100.0 meters (H&V)

APPLICANT: Cumulus Licensing Corp.

March, 2002

Prepared by:



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Engineering Statement
In Support of a Application for a
Minor Amendment to a Pending Application
WFSF, Marion, South Carolina, Channel 263C3

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ENGINEERING STATEMENT
Of
Lee S. Reynolds
And
Virgle Leon Strickland
In Support of an
Application for a Minor Amendment
To a Pending Application
WFSF
Marion, South Carolina
Channel 263C3 – 100.5 MHz
ERP: 25.0 kW(H&V)
HAAT: 100.0 m (H&V)

March, 2002

General

As broadcast technical consultants doing business as Reynolds Technical Associates, we have been authorized by Cumulus Licensing Corp (herein referred to as “Cumulus” as well as “The Applicant”), licensee of WFSF, Marion, South Carolina, to conduct engineering studies and prepare the engineering portion of an application for a minor amendment to a pending application.

This instant application is seeking to change transmitter relocation, effective radiated power and all elevations of the transmitting antenna.

This application is contingent with the application of WSEA of Atlantic Beach, South Carolina and should be considered first when reviewing and processing.

Because the proposed WFSF facility does not cover the community of license (Marion, South Carolina) with the F(50,50) 70 dBu contour, a supplemental method (Longley-Rice) is used. By using this supplemental method, the applicant (Cumulus) demonstrates that WFSF's proposed facility would continue to cover Marion with a 70-dBu contour, in compliance with §73.315 of the Commission's Rules and Regulations.

The Proposed Site
(Exhibits E, Figure 1 through 8)

Exhibit E, Figure 1 is a channel spacing study for the proposed, showing the facilities considered.

The terrain study and contour study for the proposed site is being included as Exhibit E, Figure 2).

Exhibit E, Figure 3 is the service contour map displaying the FCC F(50,50) 70 and 60 dBu contours of the proposed.

A site map is not being included since the proposed antenna is to be mounted on an approved structure with the antenna registration number 1041063. Exhibit E, Figure 4 is a vertical sketch of the proposed antenna supporting structure.

Exhibit E, Figures 5 through 8 shows how the Longley-Rice 70 dBu contour was derived and its coverage of the city of Marion.

The distance to the blanketing contour is calculated to be 1.970 kilometers (1.225 mile).

Protected and Interfering Contours
(Exhibits E, Figure 9 through 17)

Exhibits E, Figures 9 and 10 are FM overlap studies. Exhibit E, Figure 11 is a map displaying the protected and interfering contours of WFSF and WSEA.A. This

application is contingent with the application of WSEA of Atlantic Beach, South Carolina, and this application should be considered first when reviewing and processing.

Exhibits E, Figures 12 and 13 are FM overlap studies. Exhibit E, Figure 14 is a map displaying the protected and interfering contours of WFSF and WSSL.L.

Exhibits E, Figures 15 and 16 are FM overlap studies. Exhibit E, Figure 17 is a map displaying the protected and interfering contours of WFSF and WSSL.A.

Proposed Directional Antenna
(No Exhibits)

The applicant proposes contour protection by using a directional antenna. The relative field values entered in the engineering section of the FCC Form 301 demonstrate that the proposed antenna meets the Commission's rules governing FM directional antennas.

Human Exposure
(Exhibit E, Figure 18)

The proposed FM facility was evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with the RF Worksheet #1 [FCC 301 Worksheet 7 (Page 4 and 5)].

The antenna for The Applicant's proposed FM broadcast station is to be placed on an approved tower. The evaluation was for the proposed center of radiation above ground level of 81.1 meters, with an ERP (both horizontal and vertical) of 25.0 kilowatts. Also included in the evaluation was a pending application (facility number 85507) using the center of radiation above ground of 116 meters, with an ERP (vertical only) of 10.5 kilowatts. Power density two (2) meters above ground is 0.324 mW/cm^2 , well below the maximum allowable limit of 1.0 mW/cm^2 for uncontrolled/general public exposure limits, but not in compliance for the 1.0 mW/cm^2 for controlled/occupational exposure

limits. Further evaluations were conducted by using the OST FM Model for Windows. Exhibit E, Figure 18 is the results of the power density studies conducted for the proposed to demonstrate compliance.

An agreement will be put in effect, that if anyone is required to climb the tower, all facilities on the tower will either reduce power or cease operation, which ever is necessary, to prevent hazardous exposure to radiofrequency radiation.

Environmental Impact
(No Exhibits)

A grant of the proposed construction would not constitute a major action as defined in the Commission's Rules and Regulations.

During operation, the facility will produce no chemical or significant thermal pollution, and no ionizing radiation will be generated. Areas of high intensity radiofrequency fields will be confined to the immediate area of the transmitting antenna, far above the ground and away from any human and wildlife population.

The area is not officially designated as a wilderness area or wildlife preserve and is not pending consideration. The area has no significant value in American history, architecture, archaeology, or culture, which is listed in the Register of Historic Places, and it is not eligible for listing. It is not recognized either nationally or locally for special scenic or recreational value.

Conclusion

This statement/application has been prepared for The Applicant by utilizing the latest available information, cross-checked with the Federal Communications Commission and other sources. Therefore, it is submitted that the proposed is in compliance with the Commission's Rules and Regulations and other sources. Therefore, it is submitted that the engineering data compiled and demonstrated herein for the proposed is in compliance with Commission's Rules and Regulations at the time of this application's filing date. We welcome the opportunity to discuss with the staff of the Federal Communications Commission the engineering data contained in this application. Should any questions arise concerning the information, please contact us.

The following pages are exhibits prepared and assembled in support of the proposed.

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Statement of the Consultants

The instant engineering statement (amendment to a pending application) was prepared for Cumulus Licensing Corp (“The Applicant”) and supports an application for a construction permit of WFSF, Marion, South Carolina. It was developed by Lee S. Reynolds and Virgle Leon Strickland of Reynolds Technical Associates and may not be used for purposes other than submission to the Commission by The Applicant.

It may not be reproduced in its entirety, or in part, by anyone (other than from the Commission) without the written consent of Strickland and/or Reynolds.

It is prepared for The Applicant under contractual agreement, and its certification by Strickland/Reynolds is used accordingly. If The Applicant fails in its contractual obligation, Strickland/Reynolds reserve the right to withdraw its certification.

The information in this application is compiled from the most recent Commission and outside data. Strickland/Reynolds are not responsible for errors resulting from incorrect data or unpublished rule and procedure changes.

For Strickland and Reynolds:



Lee S. Reynolds

February 22nd, 2002

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