

FOR
FCC
USE
ONLY

FCC 302-AM
APPLICATION FOR AM
BROADCAST STATION LICENSE

(Please read instructions before filling out form.)

FOR COMMISSION USE ONLY

FILE NO.

SECTION I - APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

MAILING ADDRESS (Line 1) (Maximum 35 characters)

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY

STATE OR COUNTRY (if foreign address)

ZIP CODE

TELEPHONE NUMBER (include area code)

CALL LETTERS

OTHER FCC IDENTIFIER (If applicable)

2. A. Is a fee submitted with this application?

Yes No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

Governmental Entity Noncommercial educational licensee Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

(A)	(B)	(C)	
FEE TYPE CODE	FEE MULTIPLE	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
	0 0 0 1	\$	

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	
	0 0 0 1	\$	FOR FCC USE ONLY

ADD ALL AMOUNTS SHOWN IN COLUMN C,
AND ENTER THE TOTAL HERE.
THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED
REMITTANCE.

TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
\$	

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT		
MAILING ADDRESS		
CITY	STATE	ZIP CODE

2. This application is for:

- Commercial Noncommercial
 AM Directional AM Non-Directional

Call letters	Community of License	Construction Permit File No.	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
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3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

Yes No

If No, explain in an Exhibit.

Exhibit No.

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

Yes No

If No, state exceptions in an Exhibit.

Exhibit No.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

Yes No

If Yes, explain in an Exhibit.

Exhibit No.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

Yes No

If No, explain in an Exhibit.

Does not apply

Exhibit No.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

Yes No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

Exhibit No.

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

Yes No

If Yes, provide particulars as an Exhibit.

Exhibit No.
N/A

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).

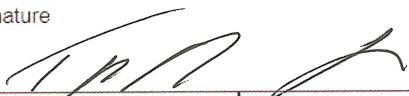
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

Yes No

2. 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.

Name Todd Bartley	Signature 	
Title Manager	Date 8-25-22	Telephone Number 570-494-7882

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

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

Station License

Direct Measurement of Power

1. Facilities authorized in construction permit					
Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
				Night	Day

2. Station location	
State	City or Town

3. Transmitter location			
State	County	City or Town	Street address (or other identification)

4. Main studio location			
State	County	City or Town	Street address (or other identification)

5. Remote control point location (specify only if authorized directional antenna)			
State	County	City or Town	Street address (or other identification)

6. Has type-approved stereo generating equipment been installed?

Yes No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?

Yes No

Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed.

Exhibit No.

8. Operating constants:	
RF common point or antenna current (in amperes) without modulation for night system	RF common point or antenna current (in amperes) without modulation for day system
Measured antenna or common point resistance (in ohms) at operating frequency Night Day	Measured antenna or common point reactance (in ohms) at operating frequency Night Day

Antenna indications for directional operation						
Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day

Manufacturer and type of antenna monitor:

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9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator	Overall height in meters of radiator above base insulator, or above base, if grounded.	Overall height in meters above ground (without obstruction lighting)	Overall height in meters above ground (include obstruction lighting)	If antenna is either top loaded or sectionalized, describe fully in an Exhibit. <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Exhibit No.</div>
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Excitation Series Shunt Folded Unipole

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude ° ' "	West Longitude ° ' "
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If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Exhibit No.

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

Exhibit No.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

11. Give reasons for the change in antenna or common point resistance.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type)	Signature (check appropriate box below) <i>Edward Schober</i>
Address (include ZIP Code)	Date
	Telephone No. (Include Area Code)

Technical Director

Registered Professional Engineer

Chief Operator

Technical Consultant

Other (specify)

Abstract

Radiotechniques Engineering, LLC has prepared this report in support of the application of Colonial Radio Group of Williamsport, LLC, licensee of WZFC (AM), FCC ID 41809 Winchester, VA to re-license its transmission facilities to share antenna system with WXVA (AM), FCC ID 4668, Winchester VA.

Antenna Description

The antenna system consists of the WXVA transmitting tower with a folded unipole and a full 120 radial ground system for 610 kHz. The required ground system for the WZFC frequency is much smaller, so the existing ground system is more than sufficient for WZFC.

The folded unipole antenna has a tuned network in a weatherproof box at the 120 ft level housing a series tuned network to bring the WZFC antenna impedance to a value practical for tuning, while changing the operating impedance at 610 kHz only slightly.

A new weatherproof cabinet that contains the diplexing and WZFC tuning network was installed above the WXVA antenna coupler. The antenna feed is connected through a common series capacitor and the two reject networks to the respective antenna couplers. There are no shunt components in the diplexer.

While this installation was occurring, there were considerable revisions to the cellular equipment on the tower above the folded unipole section.

Adjustment and Tuning

The diplexer and tuning units for WZFC and WXVA were adjusted and measured using an AIA Via Bravo vector network analyzer and antenna and line input impedance measurements were also checked with a AIM network analyzer.

When the two stations were operating under equipment tests the transmitted frequencies were measured over the air at the edge of the antenna ground system using a spectrum analyzer connected to an e-field antenna. No spurious emissions were identified, and

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harmonics of the two stations met the requirement section §73.44 below carrier, of $43 + 10 \log_{10}(1000) = -73$ db for WZFC and $10 \log_{10}(390) = -69$ db for WXVA.

No change in operating parameters or other disruptions were observed when each of the two, and the combined transmitters were operated.

No complaints of blanketing interference have been received within the 1 V/m contour.

Power Measurement

WZFC will use the power measurement method described in §73.51(a)(1) using the directional coupler in the WZFC transmitter, calibrated against the station dummy load and ammeter of the same impedance as the input to the transmitter from the antenna. The measurement point is at the input to the transmitter.

Conclusion

The construction of the transmission facilities of WZFC are now complete and operating according on equipment tests according to the construction permit and the special operating conditions thereon. An FCC form 302-AM (DM) has or will shortly be filed with the FCC for WXVA.

Agreements

The agreement as required by special operating condition #5 between Colonial Radio Group of Williamsport, LLC and Winchester Radio Broadcasters, LLC is attached to this report

Engineer's Statement

This is to certify that this report has been prepared by myself. It is correct and accurate of my own knowledge, except were stated otherwise, and where that is so, the information is correct to the best of my knowledge and belief.

I further certify that I am a Licensed Professional Engineer in the State of New Jersey, and the Commonwealth of Pennsylvania with a BSEE degree from the Newark College of Engineering of NJIT, and that I am, and have been for over forty years, regularly engaged in

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the practice of radio engineering with the firm of Radiotechniques Engineering, LLC, with offices at 402 Tenth Avenue, Haddon Heights, NJ. I am a member of the AFCCE, Senior member of the IEEE and SBE and hold a FCC General Radiotelephone Operator License. My qualifications are a matter of record with the FCC.



12 August 2022

Edward A. Schober, PE

Diplex Operating Agreement
Between
Colonial Radio Group of Williamsport, LLC
And
Winchester Radio Broadcasters, LLC

Colonial Radio Group of Williamsport, LLC (Colonial) licensee of WZFC (AM), FCC ID 41809 Winchester, VA and Winchester Radio Broadcasters, LLC, (WRB) licensee of WXVA (AM), FCC ID 4668, Winchester VA hereby agree to share and multiplex their respective transmitters into a common antenna tower under the terms of this agreement.

The installation and repair of the upper antenna coupling cabinet which contains the diplexing and WZFC tuning equipment, as well as the tower mounted shunt tuning cabinet mounted at approximately 120 feet on the tower, and the cable connected to that cabinet shall be the responsibility of Colonial.

The maintenance of the lower antenna coupling cabinet which contains the WXVA tuning equipment and its attendant cable shall be the responsibility of WRB. Colonial may have access to the electrical outlet in the WXVA tuning unit to power lights and tools.

Physical maintenance of the Unipole antenna itself, and all costs of tuning and adjustment and tower work shall be shared equally by Colonial and WRB.

Physical maintenance of the Transmitter building, electrical service, HVAC, cleaning, exterior lighting, etc shall be shared equally by Colonial and WRB.

Colonial and WRB agree to reduce power or suspend operations as required by limitations of Human Exposure to Nonionizing Radiation. Representatives of either licensee are authorized to accomplish such suspensions or reductions in power or either or both stations by notifying the other party.

This agreement is entered into under the laws of Virginia.



12 August 2022

Edward A. Schober
Executive Manager
Winchester Radio Broadcasters, LLC

Todd Bartley
Manager
Colonial Radio Group of Williamsport, LLC

___ August 2022