

W. Peter Deal
459 Bakers Ridge Rd.
Morgantown, WV 26508

Holy Family Communications
c/o Lawrence Kapp
7009 Ashbury Drive
Springfield, VA 22152

June 19, 2013

Dear Lawrence,

This letter certifies that on June 16, 2013 I personally oversaw the installation of the WHFW antenna in Winchester, VA. The antenna was installed correctly according to the instructions provided by the antenna manufacturer, Shively Labs, Inc.

I am a graduate of the Georgia Institute of Technology in Atlanta, GA with a Masters degree in Mechanical Engineering and West Virginia University in Morgantown, WV with a Bachelors Degree in Mechanical Engineering. I have overseen the construction of other FM antennas.

Best Regards,

A handwritten signature in black ink that reads "W. Peter Deal". The signature is written in a cursive, flowing style.

W. Peter Deal

Section III - Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1.	Channel: <u>209A</u>								
2.	a. Effective Radiated Power:	<u>0.185</u> kW (H)	<u>0.185</u> kW (V)						
	b. Maximum Effective Radiated Power: <input type="checkbox"/> Not applicable (Beam-Tilt Antenna ONLY)	_____ kW (H)	_____ kW (V)						
3.	Transmitter Power Output:	<u>0.157</u> kW							
4.	Antenna Data								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Manufacturer <u>Shively LABS</u></td> <td style="width: 25%;">Model <u>6810-1R-DA</u></td> <td style="width: 25%;">Number of Sections <u>1</u></td> <td style="width: 25%;">Spacing Between Sections <u>N/A</u> (wavelength)</td> </tr> </table>		Manufacturer <u>Shively LABS</u>	Model <u>6810-1R-DA</u>	Number of Sections <u>1</u>	Spacing Between Sections <u>N/A</u> (wavelength)				
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NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

All applicants must complete this section.

5. **Main Studio Location.** The main studio location complies with 47 C.F.R. Section 73.1125. Yes No See Explanation in Exhibit No.
6. **Transmitter Power Output.** The operating transmitter power output produces the authorized effective radiated power. Yes No See Explanation in Exhibit No.

APPLICATIONS FILED TO COVER A CONSTRUCTION PERMIT.

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

7. **Constructed Facility.** The facility was constructed as authorized in the underlying construction permit or complies with 47 C.F.R. Section 73.1690. Yes No See Explanation in Exhibit No.
8. **Special Operating Conditions.** The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit. Yes No See Explanation in Exhibit No.
- Exhibit No.
- An exhibit may be required.** Review the underlying construction permit.

PREPARER'S CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name <i>W. PETER DEAL</i>		Relationship to Applicant (e.g., Consulting Engineer) <i>Consulting Engineer</i>	
Signature <i>[Signature]</i>		Date <i>06/20/13</i>	
Mailing Address <i>459 BAKERS RIDGE RD, MORGANTOWN, WV</i>			
City <i>MORGANTOWN</i>		State or Country (if foreign address) <i>WV</i>	ZIP Code <i>26508</i>
Telephone Number (include area code) <i>304-599-3902</i>		E-Mail Address (if available) <i>petedeal1@yahoo.com</i>	

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).

Transmitter Power Calculator

Station Power	185 Watts ERP	
Frequency:	89.7 MHz	
Coax Type:	HJ5-50	
Coax Loss:	0.349 dB/100'	
Coax Length:	250 Ft	
Total Coax Loss:	0.8725 dB	
Antenna Gain:	1.444	1.595672 dB
Total System Loss/Gain:	0.723172 dB	
Transmitter Power:	156.6226	$TPO = ERP / (10^{(Total\ Gain / 10)})$
