Federal Communications Commission Washington, D.C. 20554	Approved by OMB 3060-0506 (June 2002)	FOR FCC USE ONLY
FCC 302-FM	3000-0300 (Julie 2002)	
APPLICATION FOR FM BROAT LICENSE	CASI STATION	FOR COMMISSION USE ONLY FILE NO 20161212ABT
Read INSTRUCTIONS Before Filling	g Out Form	

### **Section I - General Information**

1.	. Legal Name of the Applicant SHEBOYGAN AREA SCHOOL DISTRICT			
	Mailing Address 830 VIRGINIA AVENUE			
			ZIP Code 53081 -	
	Telephone Number (include ard 9204593511	ea code)	E-Mail Address (if available) MREINTHALER@SASD.NET	
	FCC Registration Number: 0006562961	Call Sign WSHS	Facility Identifier 60041	
2.	Contact Representative (if othe TIFFANY DIVEN	r than Applicant)	Firm or Company Name NORTH HIGH SCHOOL	
	Telephone Number (include are 9208037613	ea code)	E-Mail Address (if available) TDIVEN@SHEBOYGAN.K12.WI.U	JS
3.	3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):  Governmental Entity  Noncommercial Educational Licensee/Permittee  N/A (Fee Required)			C.F.R. Section 1.1114):
4.	Facility Information:			
	a. Commercial	Noncommercial		
	b. O Directional	Nondirectional		
	c. Community of License:			
	City: SHEBOYGAN State: WI			
5.	5. Program Test Authority:			
	C Requesting program test authority.			
	<ul> <li>Station operating pursuant</li> </ul>	to automatic program tes	t authority (47 C.F.R. Section 73.1620	(a)(1)).
6.	Purpose of Application:			
	© Cover construction permit ( the prefix BPH, BNPH, BMPH	list most recent construct, BPED, BMPED, or BM	ion permit file number starts with PED):	BPED- 20160913AAZ
	Modify an authorized license BLED, or BMLED):	se (list license file number	r starts with the prefix BLH, BMLH,	-
	Amend a pending application of the pending application that	<b>Exhibit</b> a listing by Sect	ion and Question Number the portions	[Exhibit 1]

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.

### Section II - Legal and Financial

1.	Certification. Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant 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.	⊙ Yes O No
2.	Licensee/Permittee certifies that all terms, conditions, and obligations set forth in the underlying construction permit have been fully met.	• Yes • No See Explanation in [Exhibit 2]
3.	Licensee/Permittee certifies that, apart from changes already reported, no cause or circumstance has 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 See Explanation in [Exhibit 3]
4.	Character Issues. Applicant certifies that neither licensee/permittee nor any party to the application has or has had any interest in, or connection with:  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 b.any pending broadcast application in which character issues have been raised.	• Yes • No See Explanation in [Exhibit 4]
5.	Adverse Findings. Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.	• Yes • No See Explanation in [Exhibit 5]
6.	Anti-Drug Abuse Act Certification. Applicant certifies that neither licensee/permittee 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 O 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 Title of Person Signing JAMES D LEIGHTY JR
8	Date 12/12/2016

### **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 JAMES D LEIGHTY JR	Relationship to Applicant (e.g., Consulting Engineer) ASSISTANT CHIEF OPERATOR
Signature	Date 12/12/2016
Mailing Address 830 VIRGINIA AVE	
City SHEBOYGAN	State or Country (if foreign address)  Zip Code  Sign 201 -

# E-Mail Address (if available) JLEIGHTY@SHEBOYGAN.K12.WI.US

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).

Sec	ction III - Engineering	
11	CHNICAL SPECIFICATIONS	
	sure that the specifications below are accurate. Contradicting data found elsewhere in this appli regarded. All items must be completed. The response "on file" is not acceptable.	cation will be
	ССН ВОХ	
1.	Channel: 219	
2.	a. Effective Radiated Power: 0.175 kW(H) kW(V)	
	b. Maximum Effective Radiated Power: kW(H) kW(V)	
	(Beam-Tilt Antenna ONLY) Not Applicable	
3.	Transmitter Power Output: 0.096 kW	
4.	Antenna Data	
	Manufacturer Model Number of Sections Spacing Between Sec SCA FMV-2-RGU 2	ctions (wavelength)
	OTE: In addition to the information called for in this section, an explanatory exhibit provi list be submitted for each question for which a "No" response is provided.	ding full particulars
CERTIFICATION  All applicants must complete this section.		
=	Main Studio Location. The main studio location complies with 47 C.F.R. Section	⊙ Yes ○ No
	73.1125.	
		See Explanation in [Exhibit 6]
6.	Transmitter Power Output. The operating transmitter power output produces the authorized effective radiated power.	• Yes • No
		See Explanation in [Exhibit 7]
11	PLICATIONS FILED TO COVER A CONSTRUCTION PERMIT.	
=	ly applicants filing this application to cover a construction permit must complete the following	
	OTE: In addition to the information called for in this section, an explanatory exhibit proving the submitted for each question for which a "No" response is provided.	ding full particulars
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 8]
8.	<b>Special Operating Conditions.</b> 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 9]

An exhibit may be required. Review the underlying construction permit.	[Exhibit 10]
APPLICATIONS FILED PURSUANT TO 47 C.F.R. SECTIONS 73.1675(c) or 73.10 Only applicants filing this application pursuant to 47 C.F.R. Sections 73.1675(c) or 73.10 following section.	
9. Changing transmitter power output. Is this application being filed to authorize in transmitter power output caused by the replacement of omnidirectional antenna wanother omnidirectional antenna or an alteration of the transmission line system? Se C.F.R. Sections 73.1690(c)(1) and (c)(10).	vith
Increasing effective radiated power. Is this application being filed to authorize increase in ERP for a station operating in the nonreserved band (Channels 221-300) C.F.R. Sections 73.1690(c)(4), (c)(5) and (c)(7).	
If "Yes" to the above, the applicant certifies the following:	. 0. 0.
a. <b>Spacing Requirements.</b> The increase in ERP was authorized pursuant to MM D 88-375 (Class A stations) OR the facility complies with the spacing requirements C.F.R. Section 73.207.	
b. <b>International Coordination.</b> The transmitter site is greater than 320 km from the Canadian or Mexican borders OR coordination for the station's international class complete.	e O Yes O No
c. <b>Interference.</b> The requirements of 47 C.F.R. Section 73.1030 regarding notifical radio astronomy installations, radio receiving installations and FCC monitoring shave either been satisfied OR are not applicable.	tion to Yes O No
<b>Exhibit required.</b> If the proposed facility must be notified to the entities set fortl C.F.R. Section 73.1030, the applicant must provide a copy of the written approva ERP increase from the affected entity.	
d. <b>Multiple Ownership Showing.</b> The increase in ERP will not require the consider a multiple ownership showing pursuant to 47 C.F.R. Section 73.3555.	Pration of See Explanation in [Exhibit 15]
e. Environmental Protection Act. The proposed facility is excluded from environ processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequent electromagnetic exposure limits for controlled and uncontrolled environments). It the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.	ficant cy See Explanation in
By checking "Yes" above, the applicant also certifies that it, in coordination with users of the site, will reduce power or cease operation as necessary to protect per having access to the site, tower or antenna from radiofrequency electromagnetic in excess of FCC guidelines.	sons
11. Increasing vertically polarized effective radiated power. Is this application be pursuant to 47 C.F.R. Section 73.1690(c)(4) to authorize an increase in the vertically polarized ERP for a station operating in the reserved band (Channels 200-220)?	
If "Yes" to the above, the applicant certifies the following:	
a. <b>TV Channel 6 Protection Requirements.</b> The facility complies with the spacin requirements of 47 C.F.R. Section 73.525(a)(1).	g
b. <b>Environmental Protection Act.</b> The proposed facility is excluded from environ processing under 47 C.F.R. Section 1.1 306 (i.e., the facility will not have a sign	

environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and u ncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an <b>Exhibit is required.</b>	See Explanation in [Exhibit 18]
By checking "Yes" above, the applicant 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.	
Decreasing effective radiated power (non-reserved channel). Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the nonreserved band (Channels 221-300)?	O Yes O No
If "Yes" to the above, the applicant certifies the following:	
a. <b>Community Coverage</b> . The proposed facility complies with the community coverage requirements of 47 C.F.R. Section 73.315 where the distance to the 3.16 mV/m contour is	
predicted using the standard prediction method in 47 C.F.R. Section 73.313.	See Explanation in [Exhibit 19]
b. <b>Auxiliary Facilities.</b> The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).	O Yes O No
	See Explanation in [Exhibit 20]
c. <b>Multiple Ownership Showing.</b> The decrease in ERP is not requested or required to establish compliance with 47 C.F.R. Section 73.3555.	O Yes O No
	See Explanation in [Exhibit 21]
Decreasing effective radiated power (reserved channel). Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(8) to authorize a decrease in the ERP for a station operating in the reserved band (Channels 200-220)?  If "Yes" to the above, the applicant certifies the following:	O Yes O No
a. Community Coverage. The proposed facility complies with the community coverage	O Yes O No
requirements of 47 C.F.R. Section 73.1690(c)(8)(i) where the distance to the 1 mV/m contour is predicted using the standard prediction method in 47 C.F.R. Section 73.313.	See Explanation in [Exhibit 22]
b. <b>Auxiliary Facilities.</b> The authorized or pending auxiliary facilities for this station comply with 47 C.F.R. Section 73.1675(a).	O Yes O No
	See Explanation in [Exhibit 23]
Replacing a directional antenna. Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(2) to replace a directional antenna with another directional antenna?	O Yes O No
If "Yes" to the above, the applicant certifies the following:	
a. <b>Measurement of Directional Antenna.</b> The composite measured pattern and measurement procedures comply with 47 C.F.R. Section 73.1690(c)(2). <b>Exhibit required.</b>	O Yes O No See Explanation in [Exhibit 24]
	[Exhibit 25]
b. Installation of Directional Antenna. The installation of the directional antenna complies with 47 C.F.R. Section 73.1690(c)(2). Exhibit required.	O Yes O No See Explanation in [Exhibit 26]
	[Exhibit 27]

15.	<b>Deleting contour protection status.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(6) to delete contour protection status (47 C.F.R. Section 73.215) for a station operating in the nonreserved band (Channels 221-300)?	O Yes O No
	If "Yes" to the above, the applicant certifies that the facility complies with the spacing requirements of 47 C.F.R. Section 73.207.	O Yes O No
		See Explanation in [Exhibit 28]
16.	Use a formerly licensed main facility as an auxiliary facility. Is this application being filed pursuant to 47 C.F.R. Section 73.1675(c)(1) to request authorization to use a formerly licensed main facility as an auxiliary facility and/or change the ERP of the proposed auxiliary facility?	O Yes O No
	If "Yes" to the above, the applicant certifies the following:	
	a. <b>Auxiliary antenna service area.</b> The proposed auxiliary facility complies with 47 C.F.R. Section 73.1675(a).	O Yes O No
		See Explanation in [Exhibit 29]
	b. <b>Environmental Protection Act.</b> The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1 306 (i.e., the facility will not have a significant	O Yes O No
	environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an <b>Exhibit is required.</b>	See Explanation in [Exhibit 30]
	By checking "Yes" above, the applicant 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.	
17.	<b>Change the license status.</b> Is this application being filed pursuant to 47 C.F.R. Section 73.1690(c)(9) to change the license status from commercial to noncommercial or from noncommercial to commercial?	O Yes O No
	If "Yes" to the above, submit an exhibit providing full particulars. For applications changing license status from commercial to noncommercial, include Section II of FCC Form 340 as an exhibit to this application.	[Exhibit 31]
DD	EPARERS CERIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.	
H V	LI AREAS CEMITICATION ON LAGE 3 MUST DE COMI LETED AND SIGNED.	

## **Exhibits**

Exhibit 7

**Description:** ERP CALCULATIONS

TRANSMISSION LINE IS 100' OF ANDREW LDF4-50 AND 15' OF TIMES MICROWAVE LMR-400. SEE ATTACHMENT FOR LINE EFFICIENCY CALCULATIONS.

OUR OLDER VERSION OF THE ANDREW LDF4-50 HAS MORE ATTENUATION THAN THE NEWER LDF4-50A.

## Attachment 7

Attachment 7	
Description	
<u>Transmission Line Loss Calculations</u>	
FMV-2 Antenna Specs	
<u>Times LMR-400 Calculation</u>	
Andrew LDF4-50a Specs	