

Federal Communications Commission Washington, D.C. 20554	Approved by OMB 3060-0034(March 2001)	FOR FCC USE ONLY
<b>FCC 340</b>		FOR COMMISSION USE ONLY FILE NO.
<b>APPLICATION FOR CONSTRUCTION PERMIT FOR RESERVED CHANNEL NONCOMMERCIAL EDUCATIONAL BROADCAST STATION</b>		BMPED - 20020904AAS
Read INSTRUCTIONS Before Filling Out Form		

**Section I - General Information**

1.	Legal Name of the Licensee/Permittee MINNESOTA PUBLIC RADIO		
	Mailing Address 45 EAST 7TH ST.		
	City ST. PAUL	State or Country (if foreign address) MN	ZIP Code 55101 -
	Telephone Number (include area code) 6512901259	E-Mail Address (if available) MGRAMLING@MPR.ORG	
		Call Sign KCMF	Facility Identifier 92307
2.	Contact Representative (if other than licensee/Permittee) TODD STANSBURY		Firm or Company Name WILEY REIN & FIELDING
	Telephone Number (include area code) 2027194948	E-Mail Address (if available) TSTANSBU@WRF.COM	
3.	Is this application being filed in response to a window? If Yes, specify closing date and/or window number: <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span>		
4.	<p><b>Application Purpose</b></p> <p> <input type="radio"/> New station  <input type="radio"/> Major Change in licensed facility  <input type="radio"/> Minor Change in licensed facility  <input type="radio"/> Major Modification of construction permit  <input checked="" type="radio"/> Minor Modification of construction permit  <input type="radio"/> Major Amendment to pending application  <input type="radio"/> Minor Amendment to pending application </p> <p>(a) File number of original construction permit: BMPED-20020416AAC</p> <p>(b) Service Type: <input checked="" type="radio"/> FM <input type="radio"/> TV <input type="radio"/> DTV</p> <p>(c) Community of License: City: FERGUS FALLS State: MN</p> <p>(d) Facility Type <input checked="" type="radio"/> Main <input type="radio"/> Auxiliary</p> <p>If an amendment, submit as an Exhibit a listing by Section and Question Number the portions of the pending application that are being revised. <span style="float: right;">[Exhibit 1]</span></p>		

**NOTE: The failure to include an explanatory providing full particulars in connection with a "No" response may result in dismissal of the application. See Instructions, paragraph L for additional information regarding completion of explanatory exhibits.**

**SECTION II - Legal and Financial**

1.	<p><b>Certification.</b> 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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
2.	<p><b>Eligibility.</b> Each application must answer "Yes" to one and "No" to two of the three following certifications. An applicant should not submit an explanatory exhibit in connection with these Question 2 "No" responses.</p> <p>The applicant certifies that it is:</p> <p>a. a nonprofit educationl institution; or</p> <p>b. a governmental entity other than a school; or</p> <p>c. a nonprofit educationl organization, other than described in a. or b.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
3.	<p>For applicants checking "Yes" to question 2(c) and applying for a new noncommercial educational television station only, the applicant certifies that the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural, and civic segments of the principal community to be served.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p>
4.	<p>a. The applicant certifies that the Commission has previously granted a broadcast application identified here by file number that found this applicant qualified as a noncommercial educational entity with a qualifying educational program, and that the applicant will use the proposed station to advance a program similar to that the Commission has found qualifying in applicant's previous application.</p> <p>b. Applicants who answered "No" to Question 4(a), must include an exhibit that describes the applicant's educational objective and how the proposed station will be used to advance an educational program that will further that objective according to 47 C.F.R. Section 73.503 (for radio applicants) and 47 C.F.R. Section 73.621 (for television applicants).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>FCC FileNumber</p> <p>-</p> <p>[Exhibit 2]</p>
5.	<p>The applicant certifies that its governing documents (e.g., articles of incorporation, by-laws, charter, enabling statute, and/or other pertinent organizational document) permit the applicant to advance an educational program and that there is no provision in any of those documents that would restrict the applicant from advancing an educational program or complying with any Commission rule, policy, or provision of the Communications Act of 1934, as amended.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
6.	<p>a. <b>Parties to the Application.</b> List separately each party to the application including, as applicable, the applicant, its officers, directors, five percent or greater stockholders, non-insulated partners, members, and all other persons and entities with attributable interests. If another entity hold an attributable interest in the applicant, list separately, as applicable, its officers, directors, five percent or greater stockholders, non-insulated partners, and board members. Create a separate row for each individual or entity. Attach additional pages if necessary.</p> <p>[Enter Parties/Owners Information]</p> <p>_____</p> <p>_____</p> <p>b. Applicant certifies that equity and financial interests not set forth above are non-attributable pursuant to 47 C.F.R. Section 73.3555 and that there are no agreements or understandings with any non-party that would give influence over the applicant's programming, personnel, or finances to that non-party.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>[Exhibit 3]</p>

7.	<p><b>Other Authorizations.</b> List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest pursuant to the notes to 47 C.F.R. Section 73.3555.</p>	<p><input checked="" type="checkbox"/> N/A [Exhibit 4]</p>
8.	<p><b>Character Issues.</b> Applicant certifies that neither applicant 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</p> <p>See Explanation in [Exhibit 5]</p>
9.	<p><b>Adverse Findings.</b> Applicant certifies that, with respect to the applicant, any party to the application, and any non-party equity owner in the applicant, 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 law related to any of the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another government unit; or discrimination.</p> <p>If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of the the court or administrative body and the proceeding (by dates and file numbers), and a description of the disposition of the matter. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 C.F.R. Section 1.65, 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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 6]</p>
10.	<p><b>Alien Ownership and Control.</b> Applicant 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</p> <p>See Explanation in [Exhibit 7]</p>
11.	<p><b>Program Service Certification.</b> Applicant certifies that it is cognizant of and will comply with its obligations as a commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
12.	<p><b>Local Public Notice.</b> Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
13.	<p><b>Anti-Drug Abuse Act Certification.</b> Applicant certifies that neither applicant 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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
14.	<p><b>Equal Employment Opportunity (EEO).</b> If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.</p>	<p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A</p>
<p><b>QUESTIONS 15, 16 AND 17 APPLY ONLY TO APPLICANTS FOR NEW STATIONS. OTHER APPLICANTS CAN PROCEED TO QUESTION 18.</b></p>		
15.	<p><b>Financial.</b> The applicant certifies that sufficient net liquid assets are on hand or that sufficient funds are available from committed sources to construct and operate the requested facilities for three months without revenue.</p> <p>If "No" to 15., answer question 16. and 17.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 8]</p>
16.	<p>Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration?</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
17.	<p>Is this application contingent upon receipt of a grant from a charitable organization, the approval of the budget of a school or university, or an appropriation from a state, county, municipality or other political subdivision?</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>

NOTE: If Yes to 16. or 17., the application cannot be granted unconditionally until all of the necessary funds are committed or appropriated. In the case of grants from the National Telecommunications and Information Administration, no further action on the applicant's part is required. If the applicant relies on funds from a source specified in Question 17., **the applicant must advise the Commission when the funds are committed or appropriated.** This should be accomplished by letter amendment to the application. Applicants should take note that the Commission's construction period is not considered "tolled" by funding difficulties and that any permit granted conditionally on funding will expire if the station is not constructed for any reason, including lack of funding.

**QUESTIONS 18 AND 19 DO NOT APPLY TO APPLICATIONS FOR NEW STATIONS. APPLICANTS FOR NEW FM STATIONS CAN PROCEED TO SECTION III. APPLICANTS FOR NEW TV STATIONS CAN PROCEED TO SECTION IV.**

**Holding Period.**

18.	Applicant certifies that this application does not propose a modification to an authorization that was awarded on the basis of a preference for fair distribution of service pursuant to 47 U.S.C. Section 307(b).	<input checked="" type="radio"/> Yes <input type="radio"/> No
	If "No," answer a. and b. below. If applicant answers "No" to 18. above and cannot answer "Yes" to either a. or b. below, the application is unacceptable.	
	a. Applicant certifies that the proposed modification will not downgrade service to the area on which the Section 307(b) preference was based.	<input type="radio"/> Yes <input type="radio"/> No
	b. Applicant certifies that although it proposes to downgrade service to the area on which the Section 307(b) preference was based, applicant has provided full service to that area for a period of four years of on-air operations.	<input type="radio"/> Yes <input type="radio"/> No
19.	Applicant certifies that this application does not propose a modification to an authorized station that received a credit for superior technical parameters under the point system selection method in 47 C.F.R. Section 73.7003.	<input checked="" type="radio"/> Yes <input type="radio"/> No
	If "No," applicant must be able to answer "Yes" to a. below or provide an exhibit that makes a compelling showing that the downgrade would be in the public interest.	
	a. Applicant certifies that the population and area within the proposed service contour (60 dBu (FM) or grade B (TV)) are greater than or equivalent to those authorized.	<input type="radio"/> Yes <input type="radio"/> No [Exhibit 9]

**Section III**

**Fair Distribution of Service Pursuant to 47 U.S.C. Section 307(b) (New and Major Changes to FM Radio Only)** (Other applicants can proceed to Section IV).

1.	Applicant certifies that the proposed station will provide a first noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1mV/m) service contour <b>and</b> (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit.	<input type="radio"/> Yes <input type="radio"/> No [Exhibit 10]
2.	Applicant certifies that the proposed station will provide a second noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1mV/m) service contour <b>and</b> (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit.	<input type="radio"/> Yes <input type="radio"/> No [Exhibit 11]

**Section IV Point System Factors - New and Major Change Applications Only** (used to select among mutually exclusive radio and television applications for new stations and major modifications) **NOTE:** Applicants will not receive any additional points for amendments made after the close of the application filing window.

1.	<p><b>Established Local Applicant:</b> Applicant certifies that for at least the 24 months immediately prior to application, and continuing through the present, it qualifies as a local applicant pursuant to 47 C.F.R. Section 73.7000, that its governing documents require that such localism be maintained, and that it has placed documentation of its qualifications as an established local applicant in a local public inspection file and has submitted to the Commission copies of the documentation.</p>	<input type="radio"/> Yes <input type="radio"/> No
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<p>2. <b>Diversity of Ownership:</b> (a) Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized station (comparing radio and television to television, including non-fill-in translator stations other than those identified in 2(b) below) in which any party to the application has an attributable interest as defined in 47 C.F.R. Section 73.3555, that its governing documents require that such diversity be maintained, and that it has placed documentation of its diversity qualification in a local public inspection file and has submitted to the Commission copies of the documentation.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>(b) Is the application's certification to 2(a) based on its exclusion of translator station(s) that will be replaced with a full service station pursuant to the authorization requested here?</p> <p>If Yes, applicant must include an exhibit identifying the translator station authorization for which it will request cancellation upon commencement of operation of the proposed full service station (i.e., upon its filing of a license application and receipt of program test authority).</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>[Exhibit 12]</p>
<p>3. <b>State-wide Network:</b> Applicant certifies that (a) it has NOT claimed a credit for diversity of ownership above: (b) it is one of the three specific types of organizations described in 47 C.F.R. Section 73.7003(b)(3); and (c) it has placed documentation of its qualifications in a local public inspection file and has submitted to the Commission copies of the documentation.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>4. <b>Technical Parameters:</b> Applicant certifies that the numbers in the boxes below accurately reflect the new area and population that its proposal would serve with a 60 dBu (FM) or Grade B (TV) signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) (FM) and 73.683(TV) and that it has documented the basis for its calculations in the local public inspection file and has submitted copies to the Commission. Major modification applicants should include the area of proposed increase only (exclude any area already within the station's existing service area). (Points, if any, will be determined by FCC)</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>New area served in square kilometers (excluding areas of water):</p>	
<p>Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:</p>	

**SECTION V - Tie Breakers - New and Major Change Applications Only** (used to choose among competing radio and television applications receiving the same number of points in Section IV)

<p>1. <b>Existing Authorizations.</b> By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of relevant broadcast station authorizations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV (2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. (number of commercial and non-commercial licenses and construction permits)</p>
<p>2. <b>Pending Applications.</b> By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of pending applications for new or major changes to relevant broadcast stations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV(2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial, and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. (number of pending commercial and non-commercial applications)</p>

**Section VI -- Certification**

<p>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.)</p>	
<p>Typed or Printed Name of Person Signing THOMAS J KIGIN</p>	<p>Typed or Printed Title of Person Signing EXECUTIVE VICE PRESIDENT</p>
<p>Signature</p>	<p>Date</p>

9/10/2002

**Section VII Preparer's Certification**

I certify that I have prepared Section VII (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 KATE MICHLER		Relationship to Applicant (e.g., Consulting Engineer)	
Signature		Date 8/29/2002	
Mailing Address DOUG VERNIER TELECOMMUNICATIONS CONSULTANTS 1600 PICTURESQUE DRIVE			
City CEDAR FALLS		State or Country (if foreign address) IA	Zip Code 50613-
Telephone Number (include area code) 3192668402		E-Mail Address (if available) KMICHLER@V-SOFT.COM	

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).

<b>Section VII - FM Engineering on Channels 200-220</b>	
<b>TECHNICAL SPECIFICATIONS</b>	
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.	
<b>TECH BOX</b>	
1.	Channel Number: 209
2.	Class (select one): <input type="radio"/> D <input checked="" type="radio"/> A <input type="radio"/> B1 <input type="radio"/> B <input type="radio"/> C3 <input type="radio"/> C2 <input type="radio"/> C1 <input type="radio"/> C0 <input type="radio"/> C
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 46 Minutes 19 Seconds 12 <input checked="" type="radio"/> North <input type="radio"/> South  Longitude: Degrees 96 Minutes 5 Seconds 32 <input checked="" type="radio"/> West <input type="radio"/> East
4.	Antenna Structure Registration Number: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA
5.	Antenna Location Site Elevation Above Mean Sea Level: 384 meters
6.	Overall Tower Height Above Ground Level: 61 meters
7.	Height of Radiation Center Above Ground Level: 55 meters(H) 55 meters(V)
8.	Height of Radiation Center Above Average Terrain: 66 meters(H) 66 meters(V)
9.	Effective Radiated Power: 2.7 kW(H) 2.7 kW(V)
10.	Maximum Effective Radiated Power: <input checked="" type="checkbox"/> Not Applicable kW(H) kW(V) (Beam-Tilt Antenna ONLY)
11.	Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> Not applicable (Nondirectional)

Rotation (Degrees):  No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0		10		20		30		40		50	
60		70		80		90		100		110	
120		130		140		150		160		170	
180		190		200		210		220		230	
240		250		260		270		280		290	
300		310		320		330		340		350	
Additional Azimuths											

**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**

**AUXILIARY ANTENNA APPLICANTS ARE NOT REQUIRED TO RESPOND TO ITEMS 12-16.**

12. **Main Studio Location.** The proposed main studio location complies with 47 C.F.R. Section 73.1125.  Yes  No

See Explanation in [Exhibit 13]

13. **Interference.** The proposed facility complies with all of the following applicable rule sections.  Yes  No  
Check all that apply:

See Explanation in [Exhibit 14]

**Contour Overlap Requirements.**

a.  47 C.F.R. Section 73.509 **Exhibit Required.** [Exhibit 15]

**Spacing Requirements.**

b.  47 C.F.R. Section 73.207 with respect to station(s)

**Grandfathered Short-Spaced.**

c.  47 C.F.R. Section 73.213(a) with respect to station(s) **Exhibit Required.** [Exhibit 16]

**Contour Protection.**

d.  47 C.F.R. Section 73.215(a) with respect to station(s) **Exhibit Required.** [Exhibit 17]

**Television Channel 6 Protection.**

e.  47 C.F.R. Section 73.525 with respect to station(s) **Exhibit Required.** [Exhibit 18]

14. **Reserved Channels Above 220.**

a. **Allotment.** The proposed facility complies with the allotment requirements of 47 C.F.R. Section 73.203.  Yes  No  
See Explanation in [Exhibit 19]

b. **Community Coverage.** The proposed facility complies with 47 C.F.R. Section 73.315.  Yes  No  
See Explanation in [Exhibit 20]



16.	<p><b>Environmental Protection Act.</b> The proposed facility is excluded from environmental 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 radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Worksheet #7, an <b>Exhibit is required.</b></p> <p>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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 22]</p>
<b>PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED.</b>		

**Exhibits**

**Exhibit 1**

**Description:** ENGINEERING STATEMENT

**Attachment 1**

Description	Type	Conversion	
		Status	File
<a href="#"><u>Exhibit #1, Engineering Statement</u></a>	Adobe Acrobat File	not needed	PDF

**Exhibit 2**

**Description:** EXPLANATION REGARDING SECTION II, QUESTIONS 2-3 AND 7-12

BECAUSE THIS APPLICATION IS FOR A MINOR MODIFICATION OF THE STATION'S CONSTRUCTION PERMIT, SECTION II, QUESTIONS 2-3 AND 7-12 ARE INAPPLICABLE. DUE TO AN APPARENT TECHNICAL PROBLEM WITH THE FCC'S ELECTRONIC FILING SYSTEM, CDBS IS REQUIRING VALUES TO BE ENTERED FOR THESE QUESTIONS AS A PREREQUISITE TO ELECTRONIC SUBMISSION. ON THE ADVICE OF FCC STAFF, MPR IS PROVIDING RESPONSES TO THESE QUESTIONS FOR THE PURPOSE OF FACILITATING ELECTRONIC FILING OF THE APPLICATION. BECAUSE THE RESPONSES ARE NOT RELEVANT TO THIS MINOR MODIFICATION APPLICATION, HOWEVER, THEY SHOULD BE DISREGARDED.

**Attachment 2**

**Exhibit 13**

**Description:** REQUEST FOR WAIVER OF SECTION 73.1125

A WAIVER OF 47 C.F.R. SECTION 73.1125 WAS PREVIOUSLY GRANTED UNDER BMPED20020416AAC TO ALLOW OPERATION OF KCMF AS A SATELLITE OPERATION OF STATION KSJN, MINNEAPOLIS, MINNESOTA.

THE APPLICANT RESPECTFULLY REQUESTS A CONTINUATION OF THIS WAIVER.

ATTACHED IS A MAP OF THE PROPOSED 60 DBU COVERAGE AREA.



**Attachment 13**

Description	Type	Conversion	
		Status	File
<a href="#">Exhibit #13, KCMF Proposed Coverage Map</a>	Adobe Acrobat File	not needed	PDF

**Attachment 14**

**Exhibit 15**

**Description:** CONTOUR OVERLAP REQUIREMENTS

**Attachment 15**

Description	Type	Conversion	
		Status	File
<a href="#">Exhibit #15, Contour Overlap Requirements</a>	Adobe Acrobat File	not needed	PDF

**Exhibit 18**

**Description:** CHANNEL SIX TELEVISION PROTECTION

**Attachment 18**

Description	Type	Conversion	
		Status	File
<a href="#">Exhibit #18, Television Channel 6 Protection</a>	Adobe Acrobat File	not needed	PDF

**Exhibit 21**

**Description:** PROTECTION TO CANADA

ALTHOUGH THE PROPOSED FM FACILITY IS WITHIN 320 KILOMETERS OF THE CANADIAN BORDER, THERE ARE NO PERTINENT RELATIONSHIPS WITH CANADIAN STATIONS.

**Attachment 21**

Description	Type	Conversion	
		Status	File
<a href="#">Exhibit #21, Canada Showing</a>	Adobe Acrobat File	not needed	PDF

**Exhibit 22**

**Description:** RF HAZARD STATEMENT

Attachment 22

Description	Type	Conversion	
		Status	File
<a href="#">Exhibit #22, RF Hazard Statement</a>	Adobe Acrobat File	not needed	PDF

**EXHIBIT #1**  
**ENGINEERING STATEMENT**

Concerning the Application of  
Minnesota Public Radio  
To Make a Minor Modification to Construction Permit  
KCMF.C  
BMPED20020416AAC  
Serving Fergus Falls, Minnesota

August 2002

**Channel 209A**

**2.7 kW H & V**

This engineering statement supports the application filed by Minnesota Public Radio to make a minor modification to construction permit, KCMF.C (BMPED20020416AAC) serving Fergus Falls, Minnesota and the surrounding area.

The applicant proposes to change location and ERP. A change area map which depicts the 60 dbu contour of the proposed facility, as well as the currently authorized construction permit is attached as Page #3 of this exhibit (Ex #1). The N.G.D.C. 30 sec terrain database was used for this and all other exhibits.

**Exhibit #13** is a request for waiver of Section 73.1125. A waiver of 47 C.F.R. Section 73.1125 was previously granted under BMPED20020416AAE to allow operation of KCMF as a satellite operation of KSJN, Minneapolis, Minnesota.

A map of the proposed 60 dBu contour is attached. 360 evenly spaced radials were used to plot the 60 dBu contour. The area within this amounts to 1,149 square kilometers. This figure was determined using numerical calculus. The distance to the 60 dBu signal contour along each of 360 evenly spaced radial azimuths was squared and then the average of the sum of these distances was calculated. The resulting average radius squared was then multiplied by  $\pi$  to determine the area within the contour: The population within the 60 dBu service contour was determined to be 19,908 people, based on 2000 census block data.

36 evenly spaced radials were used to determine the antenna height above average terrain. The N.G.D.C. 30 arc-second terrain database was used to determine the radial elevations at .1 kilometer increments from 3 to 16 kilometers. The elevation points were averaged using the required four-point interpolation method and then the average was employed to project antenna heights above average terrain and the consequent distances

to signal contours along the pertinent radials. (See a tabular listing of these contour distances on page #2.)

**Exhibit #15** is a single channel, contour to contour, allocation study showing that interference is neither caused nor received by an FM radio station or construction permit. Page # 2 of this exhibit is a narrative explaining the procedures and conventions used in the study. Page #3-12 are allocation study maps and FMOVER tabulations showing the relationship between the applicant's proposal and critical stations KBHG, Alexandria and KCCM, Morehead as well as applications 981202 in Glyndon, 981203 in Fargo, and 980427 in Fargo. There are no pertinent I.F. relationships. The proposal is within 320 kilometers of the U.S. border with Canada, but there are no relationships with Canadian stations, as depicted in the FCC minimum spacings study on Page #13.

**Exhibit #18** is a map, population report and distance-to-contour tables illustrating the relationship between the 47 and 50 dBu protected contours of WDAYTV, Fargo, ND and the 67.3 and 66.3 dBu worst case interference contours of the proposed channel 209 facility. The FM interference contour overlaps the channel six TV 47 dBu protected contour. There are 537 people in the interference area, based on 2000 Census block data. Although the 6 db receive directivity credit was valid, it was not applied in this 'worst case' scenario. The instant proposal complies with section 73.525.

**Exhibit #21** is an FCC minimum spacings study. The proposal is within 320 kilometers of the U.S. border with Canada, but there are no relationships with Canadian stations.

**Exhibit #22** shows compliance with the Commission's R.F. emission's standards.

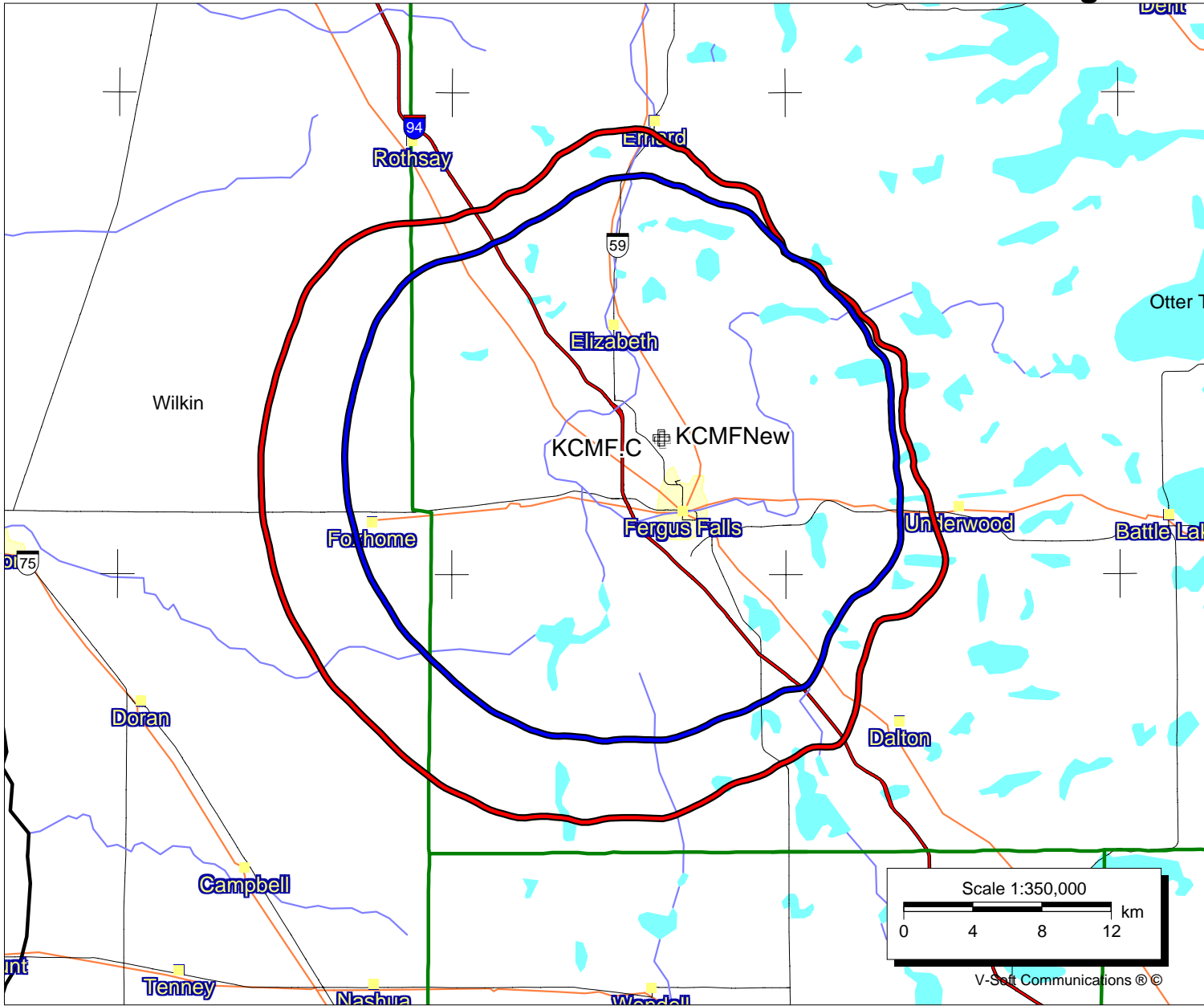
Page #4 of this exhibit (Ex. # 1) is a declaration made by the preparer attesting to her qualifications.

# KCMF 60 dBu Change Area

**KCMFNew**  
BMPED20020416AAE  
Latitude: 46-19-12 N  
Longitude: 096-05-32 W  
ERP: 2.70 kW  
Channel: 218  
Frequency: 91.5 MHz  
AMSL Height: 439.1 m  
Elevation: 384.2 m  
HAAT: 65.5 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

**KCMF.C**  
BMPED20020416AAC  
Latitude: 46-19-16 N  
Longitude: 096-05-36 W  
ERP: 0.50 kW  
Channel: 209  
Frequency: 89.7 MHz  
AMSL Height: 480.0 m  
Elevation: 378.0 m  
HAAT: 107.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

August 26, 2002



**Declaration:**

I, Katherine A. Michler, have received a Bachelor of Science degree from the University of Northern Iowa, and;

That, I declare that I have received training as a technical consultant as a member of the staff of Doug Vernier Telecommunications Consultants, and;

That, I have apprenticed under Douglas Vernier for over four years, and;

That, he has been active in broadcast consulting for over 25 years, and;

That, his qualifications are a matter of record with the Federal Communications Commission, and;

That, I am an Associate Member (#20792) of the Society of Broadcast Engineers, Indianapolis, Indiana, and;

That, the consulting firm of Doug Vernier Telecommunications Consultants has been retained by Minnesota Public Radio, St. Paul, Minnesota;

That, I have personally prepared these engineering showings, the technical information contained in same and the facts stated within are true to my knowledge, and;

That, under penalty of perjury, I declare that the foregoing is correct.

Katherine A. Michler Katherine A. Michler

Executed on August 27, 2002

Subscribed and sworn before me this 27th day of August, 2002.



Jacob L. Byers  
Notary Public in and for the State of Iowa

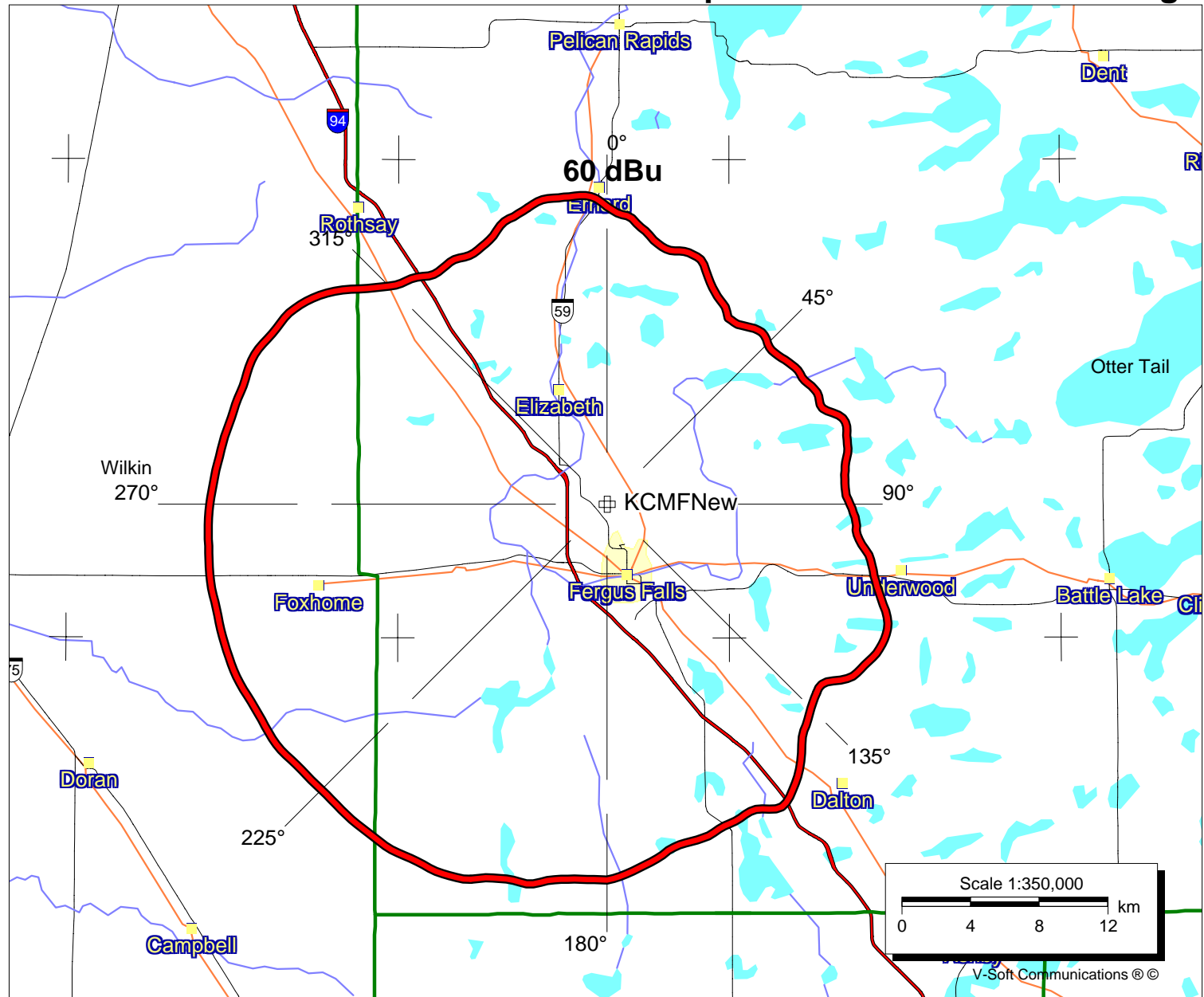
# Proposed KCMF 60 dBu Coverage

**KCMFNew**  
BMPED20020416AAC  
Latitude: 46-19-12 N  
Longitude: 096-05-32 W  
ERP: 2.70 kW  
Channel: 209  
Frequency: 89.7 MHz  
AMSL Height: 439.1 m  
Elevation: 384.2 m  
HAAT: 65.5 m  
Horiz. Pattern: Omni  
Vert. Pattern: No

Pop in 60 dBu = 19,908  
Area = 1,149 sq. km.

August 26, 2002

**V** Doug Vernier  
1600 Picturesque Drive  
Cedar Falls, Iowa 50613  
Telecommunication Consultants  
dvernier@v-soft.com 019.246.3482





KCMF - Minor Modification  
Minnesota Public Radio

REFERENCE CH# 209A - 89.7 MHz, Pwr= 2.7 kW, HAAT=65.5 M, COR= 439 M DISPLAY DATES  
46 19 12 N Ave. F(50-10) 40 dBu= 66.8 54 dBu= 28.2 80 dBu= 6.0 100 dBu= 1.9 DATA 08-22-02  
96 05 32 W SEARCH 08-22-02

CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
209A Fergus Falls	KCMF.C	CP CX MN	325.5 145.5	0.15 BMPED20020416AAC	46 19 16 96 05 36	0.500 107	480 53.4	16.0 Minnesota Public Radio	-72.48<	-82.61<
209A Morris	*KUMM	LIC HN MN	169.9 349.9	82.53 BLED19830509AB	45 35 20 95 54 22	0.225 7	364 23.1	6.9 University Of Minnesota, M	38.98	6.68
> Reference HAAT at 169.9°= 74.2 M, Pwr= 2.7 kW, Pro. Dist. = 20.43 km, Int Dist. = 68.95 km										
208C3 Alexandria	*KBHG.C	CP CN MN	130.6 310.6	66.07 BPED19980316ME	45 55 55 95 26 41	7.200 105	526 46.7	30.2 Christian Heritage Broadca	3.08	11.76
> Reference HAAT at 130.6°= 47.8 M, Pwr= 2.7 kW, Pro. Dist. = 16.28 km, Int Dist. = 24.15 km										
208C3 Glendon	*981202	APP VN MN	326.1 146.1	71.10 BPED19981202MG	46 50 58 96 36 46	10.000 105	390 50.6	32.7 Mary V. Harris Foundation	3.83	13.68
> Reference HAAT at 326.1°= 49.9 M, Pwr= 2.7 kW, Pro. Dist. = 16.71 km, Int Dist. = 24.71 km										
212C1 Moorhead	*KCCD	LIC VN MN	321.3 141.3	62.85 BLED19920612KA	46 45 35 96 36 26	100.000 153	437 7.2	58.8 Minnesota Public Radio	38.68	2.26
> Reference HAAT at 321.3°= 51.4 M, Pwr= 2.7 kW, Pro. Dist. = 17.01 km, Int Dist. = 1.74 km										
208C3 Fargo	*981203	APP VN ND	308.7 128.7	78.05 BPED19981203MC	46 45 19 96 53 26	25.000 82	356 56.5	35.7 Broadcasting For The Chall	1.82	13.34
> Reference HAAT at 308.7°= 69.3 M, Pwr= 2.7 kW, Pro. Dist. = 19.76 km, Int Dist. = 28.97 km										
208A Fargo	*980427	APP VN ND	321.6 141.6	62.72 BPED19980427MQ	46 45 38 96 36 11	5.700 98	382 42.7	27.7 Pioneer Public Broadcastin	3.18	10.21
> Reference HAAT at 321.6°= 50.4 M, Pwr= 2.7 kW, Pro. Dist. = 16.81 km, Int Dist. = 24.84 km										
208C3 Horace	981201	APP VN ND	311.8 131.8	80.88 BPED19981201MA	46 48 05 96 52 59	8.000 62	336 37.3	24.3 Selah Corporation	24.34	28.39
208A Fargo	980427	APP VN ND	313.2 133.2	79.17 BPED19980427MQ	46 48 15 96 50 58	4.200 61	335 30.6	20.8 Pioneer Public Broadcastin	29.34	30.21
207C1 Sebeka	960712	APP CN MN	52.7 232.7	109.00 BPED19960712MG	46 54 28 94 57 12	100.000 98	530 5.8	50.5 Li fetal k Broadcasting Asso	83.97	56.60
206C2 Waubun	960328	APP VN MN	28.2 208.2	90.84 BPED19960328ME	47 02 18 95 31 34	50.000 85	555 4.5	42.0 Nijii Broadcast Corporati	67.11	46.98
209A Bemidji	KBSB	LIC HN MN	35.1 215.1	159.18 BLED19790913AB	47 29 00 94 52 27	0.120 38	460 22.0	6.6 Bemidji State College	117.92	85.81
209C2 Princeton	990518	APP DVN MN	111.3 291.3	212.42 BPED19990518MB	45 35 54 93 33 18	50.000 32	334 115.6	27.2 Pensacola Christian Colleg	77.59	118.43
06Z2C Fargo	*WDAYTV	LI HN ND	312.7 132.7	114.44 BMLCT624	47 00 43 97 11 58	100.000 365	643 142.8	108.4 To Grd B= Forum Communications Compa	6.00	6.00
> Reference HAAT at 312.7°= 59.7 M, Pwr= 2.7 kW, Pro. Dist. = 221.96 km, Int Dist. = 283.27 km										

"\*" = ERP and HAAT on direct line to and from reference station. "<" = Contour Overlap

## HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

The column listed "**\* IN \***" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "**\* OUT \***" shows the distance in kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing overlap interference.

Under the "AZIMUTH" column, the first row of numbers indicate the bearings from True North of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station.

The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

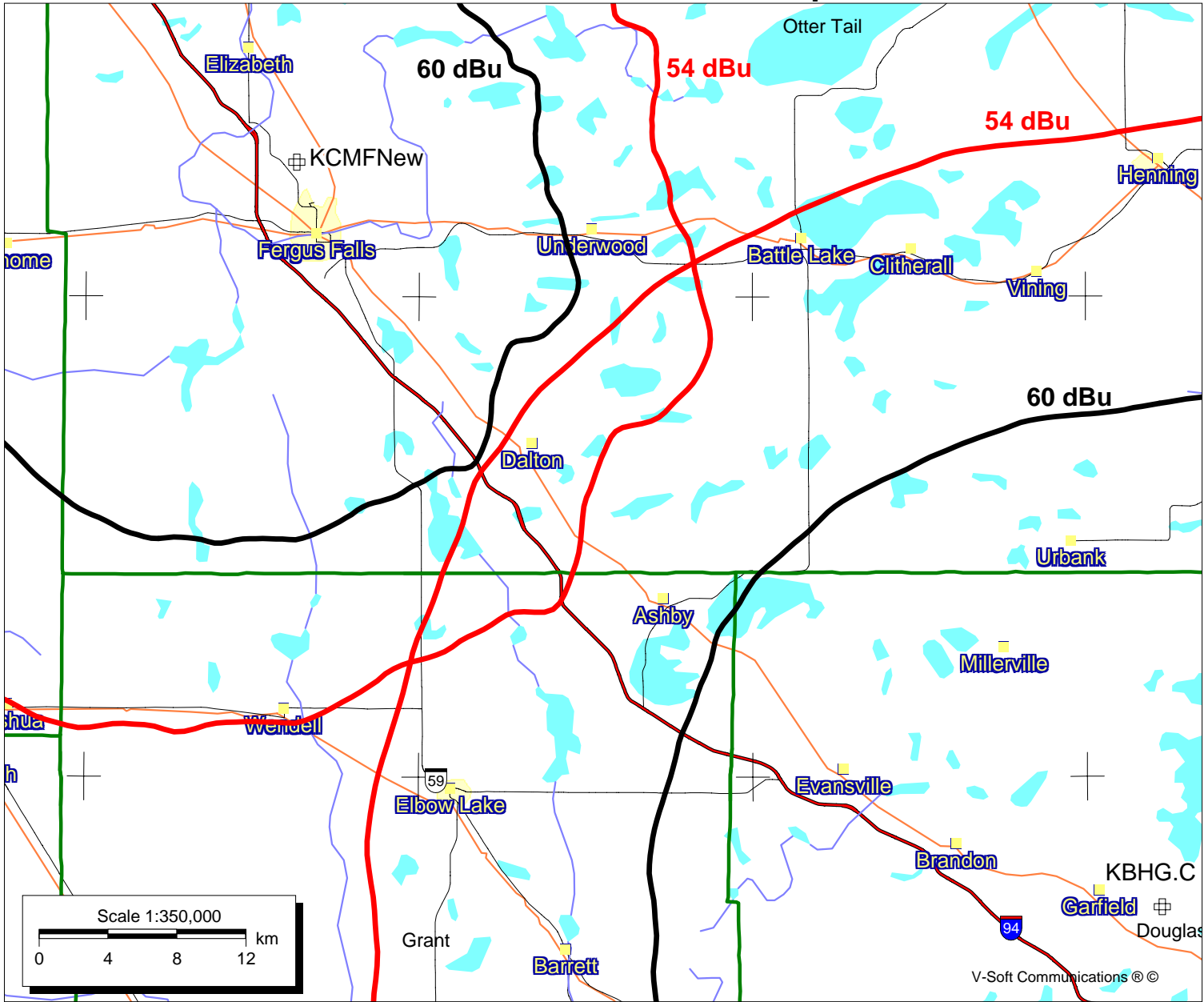
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. "Z" indicates a 73.215 directional. An "N" indicates it is a 73.215 station that operates omni. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt or an "X" if the commission is not sure, otherwise it will be an "N".

# Proposed KCMF v. KBHG.C

**KCMFNew**  
 BMPED20020416AAE  
 Latitude: 46-19-12 N  
 Longitude: 096-05-32 W  
 ERP: 2.70 kW  
 Channel: 218  
 Frequency: 91.5 MHz  
 AMSL Height: 439.1 m  
 Elevation: 384.2 m  
 HAAT: 65.5 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**KBHG.C**  
 BPED19980316ME  
 Latitude: 45-55-55 N  
 Longitude: 095-26-41 W  
 ERP: 7.20 kW  
 Channel: 208  
 Frequency: 89.5 MHz  
 AMSL Height: 526.0 m  
 Elevation: 424.1 m  
 HAAT: 98.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

August 26, 2002



KCMF.C BMPED20020416AAC  
 Channel = 209A  
 Max ERP = 2.7 kW  
 RCAMSL = 439.1 M  
 N. Lat = 46 19 12  
 W. Lng = 96 05 32

KBHG.C BPED19980316ME  
 Channel = 208C3  
 Max ERP = 7.2 kW  
 RCAMSL = 526 M  
 N. Lat = 45 55 55  
 W. Lng = 95 26 41

Protected  
 60 dBu

Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
127.0	002.7000	0051.3	017.0	312.3	007.2000	0104.2	049.2	53.0
128.0	002.7000	0049.7	016.7	311.9	007.2000	0104.2	049.4	52.9
129.0	002.7000	0048.5	016.4	311.6	007.2000	0104.2	049.7	52.8
130.0	002.7000	0047.8	016.3	311.2	007.2000	0104.9	049.8	52.8
131.0	002.7000	0047.9	016.3	310.9	007.2000	0104.9	049.8	52.8
132.0	002.7000	0048.3	016.4	310.6	007.2000	0104.9	049.7	52.9
133.0	002.7000	0048.8	016.5	310.2	007.2000	0105.5	049.6	52.9
134.0	002.7000	0049.4	016.6	309.9	007.2000	0105.5	049.5	53.0
135.0	002.7000	0050.1	016.8	309.6	007.2000	0105.5	049.4	53.0
136.0	002.7000	0051.0	016.9	309.2	007.2000	0105.6	049.3	53.1
137.0	002.7000	0052.0	017.1	308.8	007.2000	0105.6	049.1	53.1
138.0	002.7000	0052.9	017.3	308.4	007.2000	0105.4	049.0	53.2
139.0	002.7000	0053.7	017.4	308.1	007.2000	0105.4	048.9	53.2
140.0	002.7000	0055.0	017.7	307.7	007.2000	0105.4	048.8	53.2
141.0	002.7000	0056.9	018.0	307.2	007.2000	0104.9	048.5	53.3
142.0	002.7000	0059.2	018.4	306.7	007.2000	0104.9	048.2	53.4
143.0	002.7000	0061.7	018.7	306.2	007.2000	0104.5	048.0	53.5
144.0	002.7000	0064.0	019.0	305.7	007.2000	0104.5	047.8	53.6
145.0	002.7000	0066.0	019.3	305.3	007.2000	0104.4	047.6	53.6
146.0	002.7000	0067.8	019.6	304.8	007.2000	0104.4	047.5	53.6
147.0	002.7000	0069.6	019.8	304.3	007.2000	0104.7	047.4	53.7
148.0	002.7000	0071.3	020.0	303.8	007.2000	0104.7	047.4	53.7
149.0	002.7000	0072.7	020.2	303.3	007.2000	0105.2	047.3	53.8
150.0	002.7000	0073.3	020.3	302.9	007.2000	0105.2	047.4	53.7
151.0	002.7000	0072.9	020.2	302.5	007.2000	0105.2	047.7	53.7
152.0	002.7000	0071.6	020.1	302.3	007.2000	0105.1	048.0	53.5
153.0	002.7000	0070.1	019.9	302.0	007.2000	0105.1	048.3	53.4
154.0	002.7000	0069.1	019.7	301.8	007.2000	0105.1	048.6	53.3
155.0	002.7000	0068.8	019.7	301.4	007.2000	0104.3	048.8	53.1
156.0	002.7000	0069.2	019.7	301.1	007.2000	0104.3	049.0	53.1
157.0	002.7000	0069.6	019.8	300.7	007.2000	0104.3	049.2	53.0
158.0	002.7000	0070.0	019.9	300.4	007.2000	0103.1	049.3	52.9
159.0	002.7000	0070.2	019.9	300.0	007.2000	0103.1	049.5	52.8
160.0	002.7000	0070.3	019.9	299.7	007.2000	0103.1	049.7	52.7
161.0	002.7000	0070.8	020.0	299.4	007.2000	0102.0	049.9	52.6

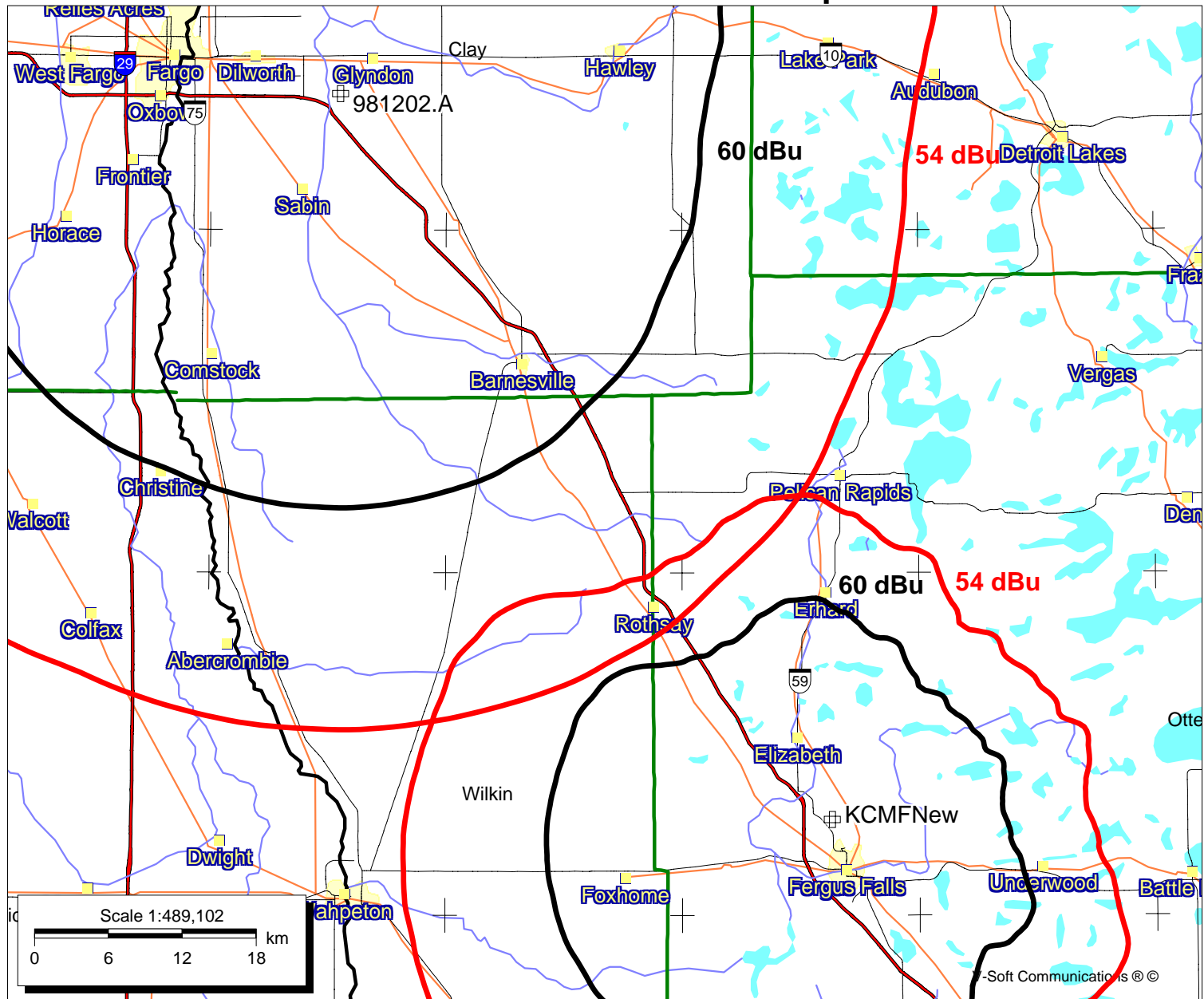
# Proposed KCMF v. 981202

**KCMFNew**  
 BMPE20020416AAE  
 Latitude: 46-19-12 N  
 Longitude: 096-05-32 W  
 ERP: 2.70 kW  
 Channel: 218  
 Frequency: 91.5 MHz  
 AMSL Height: 439.1 m  
 Elevation: 384.2 m  
 HAAT: 65.5 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**981202.A**  
 BPED19981202MG  
 Latitude: 46-50-58 N  
 Longitude: 096-36-46 W  
 ERP: 10.00 kW  
 Channel: 208  
 Frequency: 89.5 MHz  
 AMSL Height: 390.0 m  
 Elevation: 274.0 m  
 HAAT: 109.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**August 26, 2002**

**Doug Vernier**  
 1600 Picturesque Drive  
 Cedar Falls, Iowa 50613  
 Telecommunication Consultants  
 dvernier@soft.com (515) 266-8482



Doug Vernier Telecommunications Consultants  
 08-27-2002 30 Sec. Terrain Data

KCMF.C BMPED20020416AAC  
 Channel = 209A  
 Max ERP = 2.7 kW  
 RCAMSL = 439.1 M  
 N. Lat = 46 19 12  
 W. Lng = 96 05 32

981202 BPED19981202MG  
 Channel = 208C3  
 Max ERP = 10 kW  
 RCAMSL = 390 M  
 N. Lat = 46 50 58  
 W. Lng = 96 36 46

Protected  
 60 dBu

Interfering  
 54 dBu

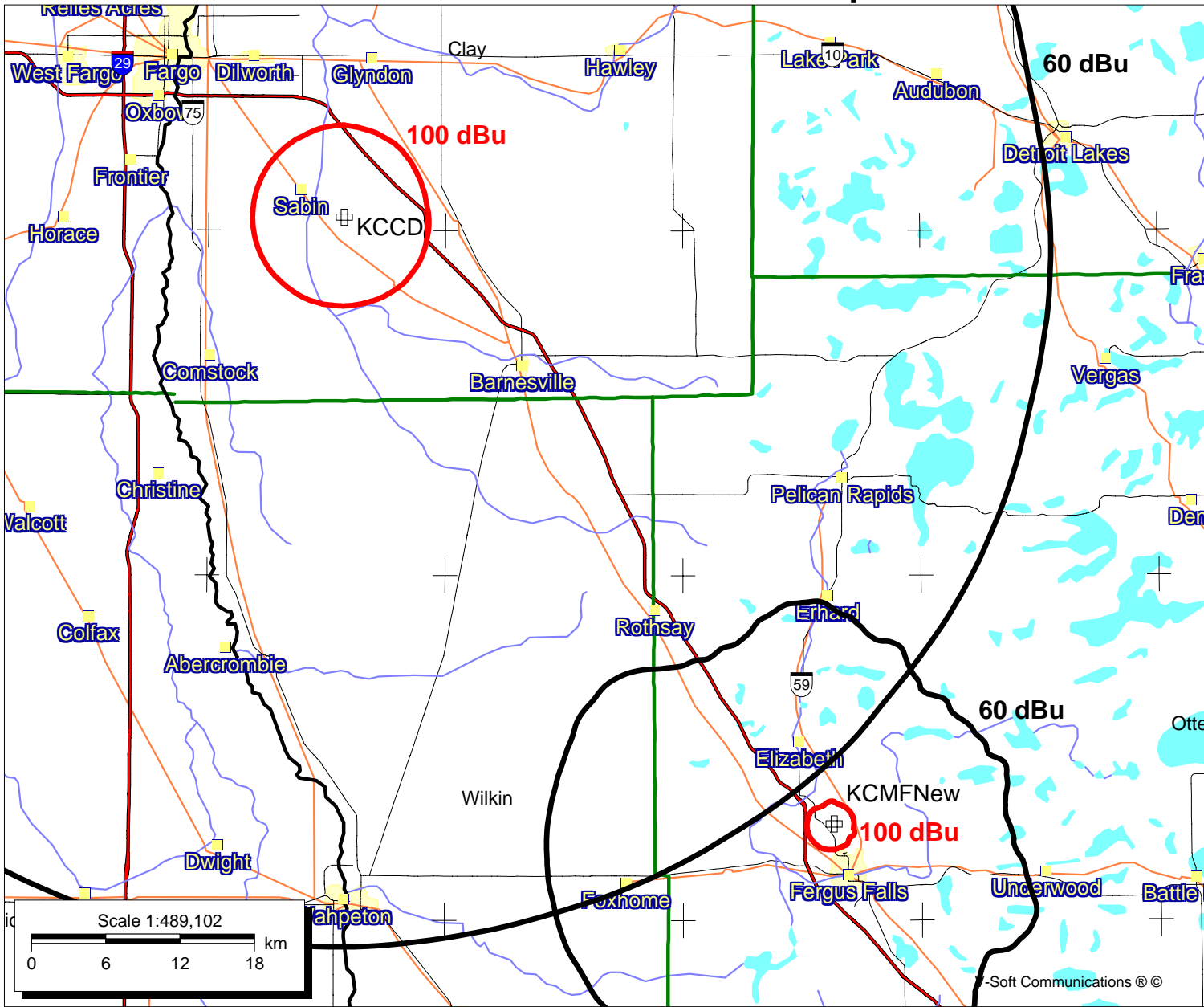
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
290.0	002.7000	0088.4	022.3	159.7	010.0000	0109.9	054.6	52.7
291.0	002.7000	0088.6	022.3	159.4	010.0000	0109.8	054.3	52.8
292.0	002.7000	0088.5	022.3	159.1	010.0000	0109.8	054.0	52.9
293.0	002.7000	0088.3	022.3	158.8	010.0000	0109.8	053.8	53.0
294.0	002.7000	0087.6	022.2	158.5	010.0000	0109.6	053.6	53.1
295.0	002.7000	0086.8	022.1	158.1	010.0000	0109.6	053.4	53.2
296.0	002.7000	0085.8	021.9	157.7	010.0000	0109.6	053.2	53.3
297.0	002.7000	0084.9	021.8	157.3	010.0000	0109.3	053.0	53.3
298.0	002.7000	0084.4	021.8	157.0	010.0000	0109.3	052.8	53.4
299.0	002.7000	0084.0	021.7	156.6	010.0000	0109.3	052.6	53.4
300.0	002.7000	0083.5	021.7	156.2	010.0000	0108.8	052.5	53.5
301.0	002.7000	0082.8	021.6	155.8	010.0000	0108.8	052.3	53.5
302.0	002.7000	0081.8	021.4	155.4	010.0000	0108.2	052.2	53.5
303.0	002.7000	0080.5	021.3	155.0	010.0000	0108.2	052.2	53.6
304.0	002.7000	0079.1	021.1	154.5	010.0000	0108.2	052.1	53.6
305.0	002.7000	0077.6	020.9	154.1	010.0000	0107.9	052.1	53.6
306.0	002.7000	0075.8	020.6	153.6	010.0000	0107.9	052.1	53.5
307.0	002.7000	0073.9	020.4	153.1	010.0000	0107.8	052.2	53.5
308.0	002.7000	0071.7	020.1	152.6	010.0000	0107.8	052.3	53.5
309.0	002.7000	0069.4	019.8	152.1	010.0000	0107.8	052.5	53.4
310.0	002.7000	0066.8	019.4	151.6	010.0000	0107.8	052.7	53.3
311.0	002.7000	0064.2	019.1	151.2	010.0000	0107.8	052.9	53.3
312.0	002.7000	0061.8	018.7	150.7	010.0000	0107.8	053.1	53.2
313.0	002.7000	0059.8	018.4	150.3	010.0000	0107.6	053.3	53.1
314.0	002.7000	0058.0	018.2	149.9	010.0000	0107.6	053.4	53.0
315.0	002.7000	0056.4	017.9	149.5	010.0000	0107.3	053.6	52.9
316.0	002.7000	0055.2	017.7	149.1	010.0000	0107.3	053.7	52.9
317.0	002.7000	0054.3	017.5	148.7	010.0000	0107.3	053.8	52.9
318.0	002.7000	0053.8	017.4	148.4	010.0000	0106.8	053.9	52.8
319.0	002.7000	0053.3	017.4	148.1	010.0000	0106.8	053.9	52.8
320.0	002.7000	0052.5	017.2	147.7	010.0000	0106.8	054.0	52.8
321.0	002.7000	0051.5	017.0	147.4	010.0000	0106.2	054.1	52.7
322.0	002.7000	0050.5	016.8	147.0	010.0000	0106.2	054.3	52.6
323.0	002.7000	0049.9	016.7	146.7	010.0000	0106.2	054.4	52.6
324.0	002.7000	0049.8	016.7	146.4	010.0000	0105.5	054.4	52.5

# Proposed KCMF v. KCCD

**KCMFNew**  
 BMPED20020416AAE  
 Latitude: 46-19-12 N  
 Longitude: 096-05-32 W  
 ERP: 2.70 kW  
 Channel: 218  
 Frequency: 91.5 MHz  
 AMSL Height: 439.1 m  
 Elevation: 384.2 m  
 HAAT: 65.5 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**KCCD**  
 BLED19920612KA  
 Latitude: 46-45-35 N  
 Longitude: 096-36-26 W  
 ERP: 100.00 kW  
 Channel: 212  
 Frequency: 90.3 MHz  
 AMSL Height: 437.0 m  
 Elevation: 280.0 m  
 HAAT: 151.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

August 26, 2002





KCCD BLED19920612KA  
 Channel = 212C1  
 Max ERP = 100 kW  
 RCAMSL = 437 M  
 N. Lat = 46 45 35  
 W. Lng = 96 36 26

KCMF.C BMPED20020416AAC  
 Channel = 209A  
 Max ERP = 2.7 kW  
 RCAMSL = 439.1 M  
 N. Lat = 46 19 12  
 W. Lng = 96 05 32

Protected  
 60 dBu

Interfering  
 100 dBu

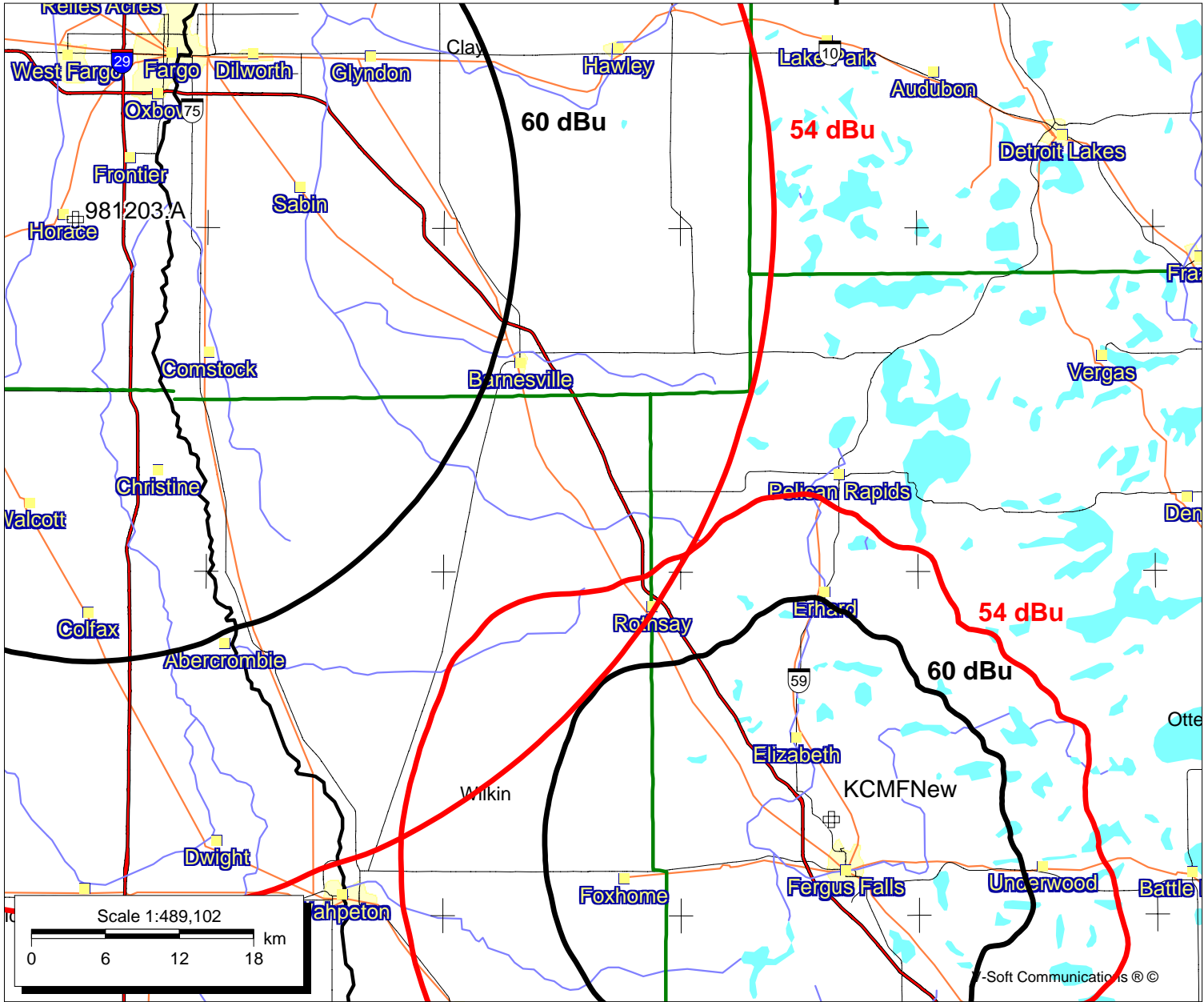
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
124.0	100.0000	0149.3	058.4	028.6	002.7000	0033.7	018.5	55.3
125.0	100.0000	0149.4	058.4	028.0	002.7000	0034.3	017.4	56.3
126.0	100.0000	0149.5	058.4	027.6	002.7000	0034.3	016.4	57.2
127.0	100.0000	0149.5	058.4	027.0	002.7000	0035.1	015.4	58.3
128.0	100.0000	0149.6	058.4	026.3	002.7000	0036.1	014.4	59.5
129.0	100.0000	0149.8	058.4	025.5	002.7000	0037.2	013.4	61.0
130.0	100.0000	0149.9	058.5	024.4	002.7000	0038.5	012.4	62.7
131.0	100.0000	0150.1	058.5	023.1	002.7000	0040.0	011.4	64.5
132.0	100.0000	0150.4	058.5	021.6	002.7000	0041.5	010.5	66.5
133.0	100.0000	0151.0	058.6	019.8	002.7000	0042.9	009.5	68.5
134.0	100.0000	0151.7	058.7	017.6	002.7000	0043.2	008.5	70.4
135.0	100.0000	0152.3	058.8	014.6	002.7000	0042.6	007.6	72.1
136.0	100.0000	0152.7	058.8	010.5	002.7000	0044.3	006.7	74.6
137.0	100.0000	0152.9	058.8	004.7	002.7000	0049.7	005.9	78.0
138.0	100.0000	0152.9	058.8	357.0	002.7000	0056.3	005.2	81.5
139.0	100.0000	0152.9	058.8	346.9	002.7000	0057.1	004.6	83.6
140.0	100.0000	0152.9	058.8	334.4	002.7000	0049.5	004.2	83.8
141.0	100.0000	0152.9	058.8	320.3	002.7000	0052.5	004.1	84.8
142.0	100.0000	0152.9	058.8	306.3	002.7000	0075.8	004.2	87.3
143.0	100.0000	0152.8	058.8	294.1	002.7000	0087.6	004.6	87.0
144.0	100.0000	0152.7	058.8	284.4	002.7000	0089.3	005.3	85.1
145.0	100.0000	0152.4	058.8	277.0	002.7000	0091.9	006.0	83.1
146.0	100.0000	0152.2	058.8	271.4	002.7000	0094.6	006.8	81.1
147.0	100.0000	0152.0	058.7	267.2	002.7000	0096.1	007.7	79.0
148.0	100.0000	0152.0	058.7	263.9	002.7000	0096.8	008.6	77.2
149.0	100.0000	0152.0	058.7	261.2	002.7000	0097.8	009.5	75.5
150.0	100.0000	0152.1	058.7	259.0	002.7000	0098.5	010.5	73.9
151.0	100.0000	0152.2	058.8	257.4	002.7000	0098.6	011.5	72.3
152.0	100.0000	0152.2	058.7	256.1	002.7000	0098.6	012.5	70.8
153.0	100.0000	0152.1	058.7	255.1	002.7000	0098.7	013.5	69.4
154.0	100.0000	0152.1	058.7	254.3	002.7000	0098.9	014.5	68.2
155.0	100.0000	0152.1	058.7	253.7	002.7000	0098.9	015.5	67.3
156.0	100.0000	0152.0	058.7	253.2	002.7000	0099.3	016.5	66.5
157.0	100.0000	0151.9	058.7	252.8	002.7000	0099.3	017.5	65.6
158.0	100.0000	0151.8	058.7	252.6	002.7000	0099.3	018.5	64.8

# Proposed KCMF v. 981203

**KCMFNew**  
 BNPED20020416AAE  
 Latitude: 46-19-12 N  
 Longitude: 096-05-32 W  
 ERP: 2.70 kW  
 Channel: 218  
 Frequency: 91.5 MHz  
 AMSL Height: 439.1 m  
 Elevation: 384.2 m  
 HAAT: 65.5 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**981203.A**  
 BNPED19981203MC  
 Latitude: 46-45-19 N  
 Longitude: 096-53-26 W  
 ERP: 25.00 kW  
 Channel: 208  
 Frequency: 89.5 MHz  
 AMSL Height: 356.0 m  
 Elevation: 274.0 m  
 HAAT: 80.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

August 26, 2002



Doug Vernier Telecommunications Consultants  
 08-27-2002 30 Sec. Terrain Data

KCMF.C BMPED20020416AAC  
 Channel = 209A  
 Max ERP = 2.7 kW  
 RCAMSL = 439.1 M  
 N. Lat = 46 19 12  
 W. Lng = 96 05 32

981203 BPED19981203MC  
 Channel = 208C3  
 Max ERP = 25 kW  
 RCAMSL = 356 M  
 N. Lat = 46 45 19  
 W. Lng = 96 53 26

Protected  
 60 dBu

Interfering  
 54 dBu

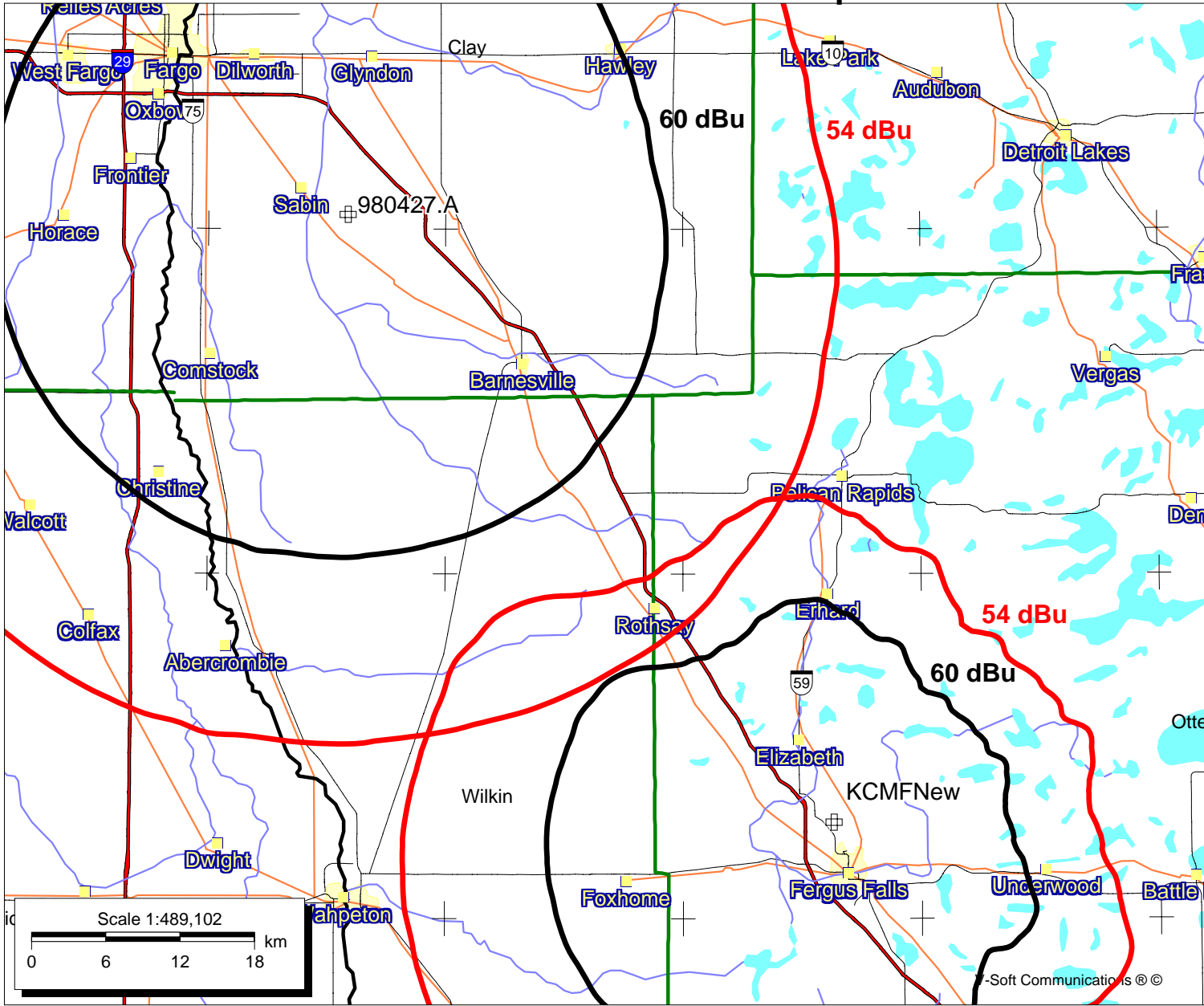
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
284.0	002.7000	0089.3	022.4	137.3	025.0000	0081.8	058.4	53.3
285.0	002.7000	0089.1	022.4	137.0	025.0000	0081.8	058.2	53.4
286.0	002.7000	0088.8	022.3	136.6	025.0000	0081.8	058.0	53.5
287.0	002.7000	0088.4	022.3	136.3	025.0000	0081.8	057.8	53.5
288.0	002.7000	0088.2	022.2	135.9	025.0000	0081.8	057.7	53.6
289.0	002.7000	0088.2	022.2	135.6	025.0000	0081.8	057.5	53.6
290.0	002.7000	0088.4	022.3	135.2	025.0000	0081.8	057.3	53.7
291.0	002.7000	0088.6	022.3	134.9	025.0000	0081.8	057.1	53.8
292.0	002.7000	0088.5	022.3	134.5	025.0000	0081.8	057.0	53.8
293.0	002.7000	0088.3	022.3	134.2	025.0000	0081.7	056.9	53.9
294.0	002.7000	0087.6	022.2	133.8	025.0000	0081.7	056.8	53.9
295.0	002.7000	0086.8	022.1	133.4	025.0000	0081.6	056.8	53.9
296.0	002.7000	0085.8	021.9	133.0	025.0000	0081.6	056.8	53.9
297.0	002.7000	0084.9	021.8	132.6	025.0000	0081.6	056.8	53.9
298.0	002.7000	0084.4	021.8	132.2	025.0000	0081.5	056.7	53.9
299.0	002.7000	0084.0	021.7	131.8	025.0000	0081.5	056.7	53.9
300.0	002.7000	0083.5	021.7	131.4	025.0000	0081.5	056.7	53.9
301.0	002.7000	0082.8	021.6	131.0	025.0000	0081.5	056.7	53.9
302.0	002.7000	0081.8	021.4	130.6	025.0000	0081.5	056.8	53.9
303.0	002.7000	0080.5	021.3	130.2	025.0000	0081.6	056.9	53.9
304.0	002.7000	0079.1	021.1	129.8	025.0000	0081.6	057.0	53.8
305.0	002.7000	0077.6	020.9	129.4	025.0000	0081.7	057.2	53.8
306.0	002.7000	0075.8	020.6	129.1	025.0000	0081.7	057.4	53.7
307.0	002.7000	0073.9	020.4	128.7	025.0000	0081.7	057.6	53.6
308.0	002.7000	0071.7	020.1	128.3	025.0000	0081.6	057.9	53.5
309.0	002.7000	0069.4	019.8	128.0	025.0000	0081.6	058.2	53.4
310.0	002.7000	0066.8	019.4	127.7	025.0000	0081.6	058.6	53.3
311.0	002.7000	0064.2	019.1	127.3	025.0000	0081.6	059.0	53.1
312.0	002.7000	0061.8	018.7	127.1	025.0000	0081.6	059.3	53.0
313.0	002.7000	0059.8	018.4	126.8	025.0000	0081.6	059.6	52.9
314.0	002.7000	0058.0	018.2	126.5	025.0000	0081.6	059.9	52.8
315.0	002.7000	0056.4	017.9	126.2	025.0000	0081.6	060.2	52.7
316.0	002.7000	0055.2	017.7	126.0	025.0000	0081.6	060.5	52.6
317.0	002.7000	0054.3	017.5	125.7	025.0000	0081.6	060.7	52.6
318.0	002.7000	0053.8	017.4	125.4	025.0000	0081.7	060.9	52.5

# Proposed KCMF v. 980427

**KCMFNew**  
 BMPED20020416AAE  
 Latitude: 46-19-12 N  
 Longitude: 096-05-32 W  
 ERP: 2.70 kW  
 Channel: 218  
 Frequency: 91.5 MHz  
 AMSL Height: 439.1 m  
 Elevation: 384.2 m  
 HAAT: 65.5 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**980427.A**  
 BPED19980427MQ  
 Latitude: 46-45-38 N  
 Longitude: 096-36-11 W  
 ERP: 5.70 kW  
 Channel: 208  
 Frequency: 89.5 MHz  
 AMSL Height: 382.0 m  
 Elevation: 280.0 m  
 HAAT: 96.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

August 26, 2002



KCMF.C BMPED20020416AAC  
 Channel = 209A  
 Max ERP = 2.7 kW  
 RCAMSL = 439.1 M  
 N. Lat = 46 19 12  
 W. Lng = 96 05 32

980427 BPED19980427MQ  
 Channel = 208A  
 Max ERP = 5.7 kW  
 RCAMSL = 382 M  
 N. Lat = 46 45 38  
 W. Lng = 96 36 11

Protected  
 60 dBu

Interfering  
 54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
292.0	002.7000	0088.5	022.3	155.5	005.7000	0097.1	044.6	53.2
293.0	002.7000	0088.3	022.3	155.1	005.7000	0097.1	044.4	53.3
294.0	002.7000	0087.6	022.2	154.7	005.7000	0097.1	044.2	53.4
295.0	002.7000	0086.8	022.1	154.2	005.7000	0097.1	044.0	53.4
296.0	002.7000	0085.8	021.9	153.7	005.7000	0097.1	043.9	53.5
297.0	002.7000	0084.9	021.8	153.2	005.7000	0097.2	043.7	53.5
298.0	002.7000	0084.4	021.8	152.8	005.7000	0097.2	043.6	53.6
299.0	002.7000	0084.0	021.7	152.3	005.7000	0097.2	043.4	53.7
300.0	002.7000	0083.5	021.7	151.8	005.7000	0097.2	043.3	53.7
301.0	002.7000	0082.8	021.6	151.4	005.7000	0097.1	043.1	53.8
302.0	002.7000	0081.8	021.4	150.8	005.7000	0097.1	043.1	53.8
303.0	002.7000	0080.5	021.3	150.3	005.7000	0097.0	043.0	53.8
304.0	002.7000	0079.1	021.1	149.7	005.7000	0097.0	043.0	53.8
305.0	002.7000	0077.6	020.9	149.2	005.7000	0097.0	043.1	53.8
306.0	002.7000	0075.8	020.6	148.6	005.7000	0097.0	043.1	53.8
307.0	002.7000	0073.9	020.4	148.1	005.7000	0097.2	043.2	53.7
308.0	002.7000	0071.7	020.1	147.5	005.7000	0097.3	043.4	53.7
309.0	002.7000	0069.4	019.8	146.9	005.7000	0097.3	043.6	53.6
310.0	002.7000	0066.8	019.4	146.3	005.7000	0097.5	043.8	53.5
311.0	002.7000	0064.2	019.1	145.8	005.7000	0097.5	044.1	53.4
312.0	002.7000	0061.8	018.7	145.3	005.7000	0097.7	044.3	53.4
313.0	002.7000	0059.8	018.4	144.8	005.7000	0097.7	044.5	53.3
314.0	002.7000	0058.0	018.2	144.3	005.7000	0097.8	044.7	53.2
315.0	002.7000	0056.4	017.9	143.9	005.7000	0097.8	044.9	53.1
316.0	002.7000	0055.2	017.7	143.4	005.7000	0097.8	045.1	53.1
317.0	002.7000	0054.3	017.5	143.0	005.7000	0097.8	045.2	53.0
318.0	002.7000	0053.8	017.4	142.6	005.7000	0097.8	045.3	53.0
319.0	002.7000	0053.3	017.4	142.2	005.7000	0097.8	045.4	53.0
320.0	002.7000	0052.5	017.2	141.8	005.7000	0097.8	045.5	52.9
321.0	002.7000	0051.5	017.0	141.5	005.7000	0097.8	045.7	52.8
322.0	002.7000	0050.5	016.8	141.1	005.7000	0097.8	045.9	52.8
323.0	002.7000	0049.9	016.7	140.7	005.7000	0097.8	046.0	52.7
324.0	002.7000	0049.8	016.7	140.4	005.7000	0097.8	046.0	52.7
325.0	002.7000	0049.9	016.7	140.0	005.7000	0097.8	046.0	52.7
326.0	002.7000	0050.0	016.7	139.6	005.7000	0097.8	046.0	52.7

Doug Vernier Telecommunications Consultants  
 1600 Picturesque Drive, Cedar Falls, IA 50613  
 KCMF - Minor Modification  
 Minnestoa Public Radio

REFERENCE  
 46 19 12 N  
 96 05 32 W

CLASS = A  
 Current Spacings

DISPLAY DATES  
 DATA 08-24-02  
 SEARCH 08-26-02

----- Channel 209 - 89.7 MHz -----

Call	Channel	Location		Dist	Azi	FCC	Margin
KCMF.C CP	209A	Fergus Falls	MN	0.15	325.5	115.0	-114.85
KUMM LIC	209A	Morris	MN	82.53	169.9	115.0	-32.47
KBHG.C CP	208C3	Alexandria	MN	66.07	130.6	89.0	-22.93
981202 APP	208C3	Glyndon	MN	71.10	326.1	89.0	-17.90
KCCD LIC	212C1	Moorhead	MN	62.85	321.3	75.0	-12.15
981203 APP	208C3	Fargo	ND	78.05	308.7	89.0	-10.95
980427 APP	208A	Fargo	ND	62.72	321.6	72.0	-9.28
981201 APP	208C3	Horace	ND	80.88	311.8	89.0	-8.12
980427 APP	208A	Fargo	ND	79.17	313.2	72.0	7.17
960712 APP	207C1	Sebeka	MN	109.00	52.7	75.0	34.00
960328 APP	206C2	Waubun	MN	90.84	28.2	55.0	35.84
KBSB LIC	209A	Bemidji	MN	159.18	35.1	115.0	44.18
990518 APP	209C2	Princeton	MN	212.42	111.3	166.0	46.42
KSJRFM LIC	211C1	Collegeville	MN	151.36	126.7	75.0	76.36
KBPG.C CP	208A	Montevideo	MN	158.73	169.8	72.0	86.73

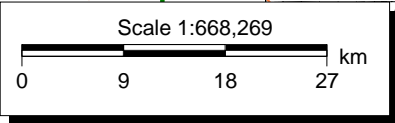
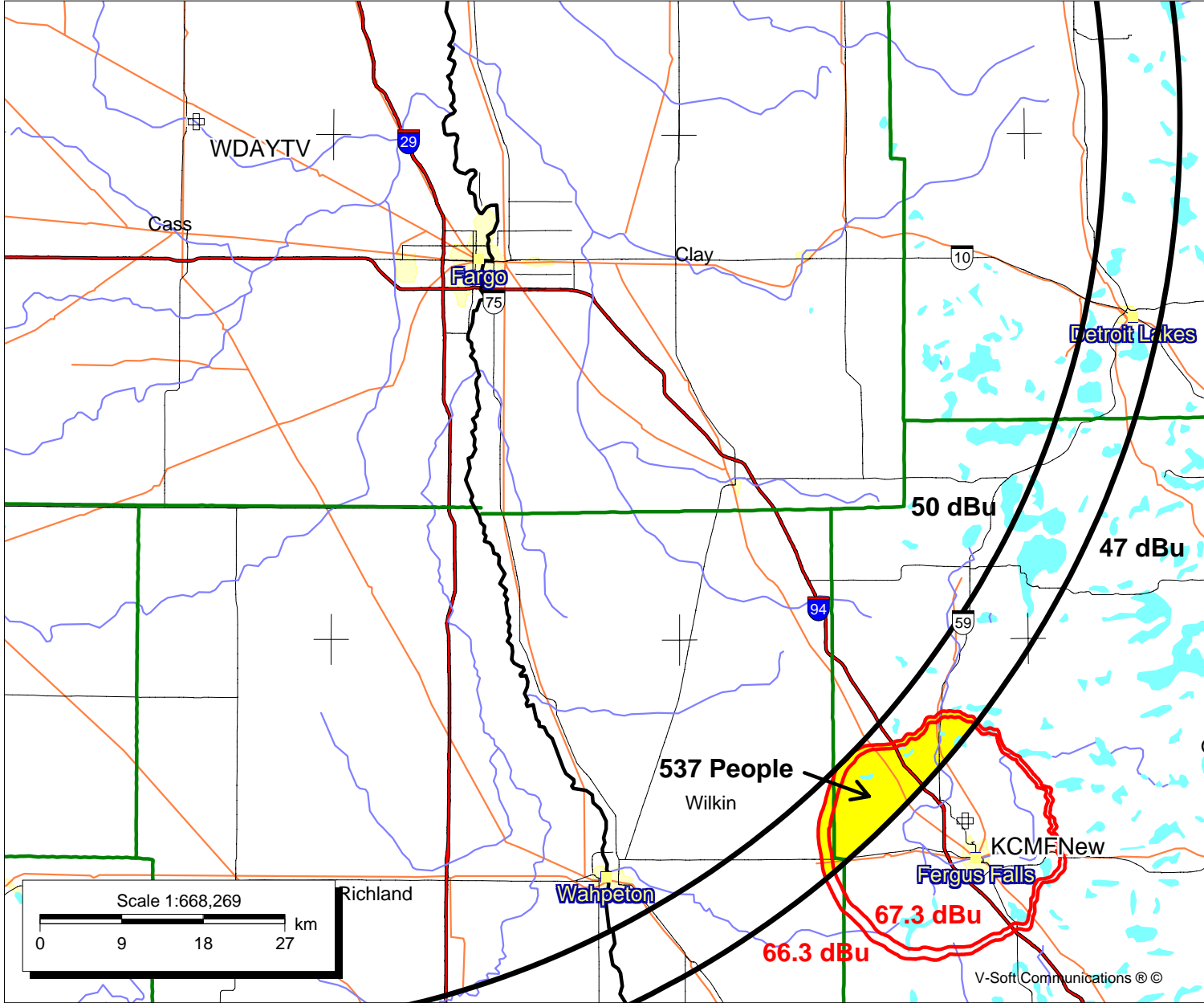
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# Proposed KCMF v. WDAYTV

**KCMFNew**  
 BMPED20020416AAC  
 Latitude: 46-19-12 N  
 Longitude: 096-05-32 W  
 Study ERP: 2.7675 kW  
 2.7 kW H + 2.7 kW V/40  
 Channel: 209  
 Frequency: 89.7 MHz  
 AMSL Height: 439.1 m  
 Elevation: 384.2 m  
 HAAT: 65.5 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**WDAYTV**  
 BMLCT624  
 Latitude: 47-00-43 N  
 Longitude: 097-11-58 W  
 ERP: 100.00 kW  
 Channel: 06Z  
 Frequency: 85.0 MHz  
 AMSL Height: 643.0 m  
 Elevation: 287.0 m  
 HAAT: 351.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**August 26, 2002**





Doug Vernier Telecommunications Consultants Population Report

KCMFNew / WDAYTV

This overlap region consists of the intersection of the following contours:

KCMFNew: FCC F(50-10) 66.30 dBu

WDAYTV: FCC F(50-50) 47.00 dBu

Population Database: 2000 US Census (SF1)

Total Population Within Overlap Region: 537

Total Housing Units Within Overlap Region: 215

Total Area Within Overlap Region: 132.45 sq. km

-----  
KCMFNew: FCC F(50-10) 66.30 dBu

Transmitter Information:

Call Letters: KCMFNew

File Number: BMPED20020416AAC

Latitude: 46-19-12 N

Longitude: 096-05-32 W

ERP: 2.7675 kW

Channel: 209

Frequency: 89.7 MHz

AMSL Height: 439.1 m

Elevation: 384.2 m

HAAT: 65.5 m

Horiz. Antenna Pattern: Omni

Vert. Elevation Pattern: No

-----  
WDAYTV: FCC F(50-50) 47.00 dBu

Transmitter Information:

Call Letters: WDAYTV

File Number: BMLCT624

Latitude: 47-00-43 N

Longitude: 097-11-58 W

ERP: 100.00 kW

Channel: 06Z

Frequency: 85.0 MHz

AMSL Height: 643.0 m

Elevation: 287.0 m

HAAT: 351.0 m

Horiz. Antenna Pattern: Omni

Vert. Elevation Pattern: No

Doug Vernier Telecommunications Consultants  
 KCMF.C, Minnesota Public Radio, TV6 Interference Contours  
 ERP = 2.7675 kW  
 Channel = 209

Azimuth Deg. T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-10) Distance to 67.3 dBu Contour km	F(50-10) Distance to 66.3 dBu Contour km
0	386.2	52.9	4.421	11.41	12.05
10	394.8	44.3	4.421	10.41	11.00
20	396.2	42.9	4.421	10.24	10.83
30	405.9	33.2	4.421	8.99	9.54
40	406.7	32.4	4.421	8.88	9.43
50	407.2	31.9	4.421	8.82	9.36
60	404.5	34.6	4.421	9.17	9.72
70	399.9	39.2	4.421	9.77	10.35
80	402.5	36.6	4.421	9.43	9.99
90	402.3	36.8	4.421	9.46	10.02
100	396.5	42.6	4.421	10.20	10.79
110	387.3	51.8	4.421	11.29	11.92
120	383.2	55.9	4.421	11.72	12.38
130	391.3	47.8	4.421	10.84	11.45
140	384.1	55.0	4.421	11.62	12.27
150	365.8	73.3	4.421	13.20	13.95
160	368.8	70.3	4.421	12.95	13.69
170	364.8	74.3	4.421	13.28	14.04
180	354.0	85.1	4.421	14.18	15.25
190	350.3	88.8	4.421	14.50	15.68
200	343.0	96.1	4.421	15.33	16.51
210	339.7	99.4	4.421	15.69	16.88
220	339.8	99.3	4.421	15.68	16.86
230	339.9	99.2	4.421	15.67	16.85
240	339.2	99.9	4.421	15.74	16.93
250	339.0	100.1	4.421	15.76	16.95
260	340.9	98.2	4.421	15.56	16.74
270	344.0	95.1	4.421	15.23	16.40
280	348.3	90.8	4.421	14.67	15.92
290	350.7	88.4	4.421	14.46	15.63
300	355.6	83.5	4.421	14.05	15.07
310	372.3	66.8	4.421	12.66	13.37
320	386.6	52.5	4.421	11.36	12.00
330	389.9	49.2	4.421	11.00	11.62
340	385.2	53.9	4.421	11.52	12.16
350	381.8	57.3	4.421	11.85	12.51

Ave. = 373.6 M      65.5 M

Antenna Radiation Center AMSL = 439.1 M  
 NGDC 30 Arc Sec.

Geographic Coordinates:

N. Lat. 46 19 12  
 W. Lng. 96 05 32

Doug Vernier Telecommunications Consultants  
 WDAYTV, Forum Communications Company, BMLCT624  
 ERP = 100 kW  
 Channel = 06Z

Azimuth Deg. T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-50) Distance to 47 dBu Contour km	F(50-50) Distance to 50 dBu Contour km
0	296.1	346.9	20.000	107.07	99.14
10	292.3	350.7	20.000	107.34	99.38
20	290.4	352.6	20.000	107.48	99.50
30	289.0	354.0	20.000	107.58	99.59
40	287.9	355.1	20.000	107.66	99.66
50	286.1	356.9	20.000	107.80	99.78
60	282.9	360.1	20.000	108.03	99.98
70	280.9	362.1	20.000	108.19	100.12
80	279.3	363.7	20.000	108.31	100.23
90	278.4	364.6	20.000	108.38	100.29
100	278.0	365.0	20.000	108.42	100.32
110	277.3	365.7	20.000	108.47	100.37
120	277.1	365.9	20.000	108.48	100.38
130	277.2	365.8	20.000	108.48	100.37
140	277.3	365.7	20.000	108.47	100.37
150	278.7	364.3	20.000	108.36	100.27
160	279.4	363.6	20.000	108.30	100.22
170	281.6	361.4	20.000	108.13	100.07
180	282.2	360.8	20.000	108.09	100.03
190	282.4	360.6	20.000	108.08	100.02
200	287.0	356.0	20.000	107.73	99.72
210	287.7	355.3	20.000	107.68	99.67
220	289.0	354.0	20.000	107.58	99.59
230	292.3	350.7	20.000	107.34	99.38
240	295.4	347.6	20.000	107.11	99.18
250	301.5	341.5	20.000	106.68	98.80
260	305.5	337.5	20.000	106.39	98.55
270	306.9	336.1	20.000	106.29	98.46
280	306.4	336.6	20.000	106.33	98.49
290	306.6	336.4	20.000	106.32	98.48
300	305.2	337.8	20.000	106.42	98.57
310	305.4	337.6	20.000	106.40	98.55
320	305.5	337.5	20.000	106.39	98.55
330	305.0	338.0	20.000	106.43	98.58
340	302.4	340.6	20.000	106.61	98.74
350	299.1	343.9	20.000	106.85	98.95

Ave. = 290.4 M      352.6 M

Antenna Radiation Center AMSL = 643 M  
 NGDC 30 Arc Sec.

Geographic Coordinates:

N. Lat. 47 00 43

W. Lng. 97 11 58

Doug Vernier Telecommunications Consultants  
 1600 Picturesque Drive, Cedar Falls, IA 50613  
 KCMF - Minor Modification  
 Minnestoa Public Radio

REFERENCE  
 46 19 12 N  
 96 05 32 W

CLASS = A  
 Current Spacings

DISPLAY DATES  
 DATA 08-24-02  
 SEARCH 08-26-02

----- Channel 209 - 89.7 MHz -----

Call	Channel	Location		Dist	Azi	FCC	Margin
KCMF.C CP	209A	Fergus Falls	MN	0.15	325.5	115.0	-114.85
KUMM LIC	209A	Morris	MN	82.53	169.9	115.0	-32.47
KBHG.C CP	208C3	Alexandria	MN	66.07	130.6	89.0	-22.93
981202 APP	208C3	Glyndon	MN	71.10	326.1	89.0	-17.90
KCCD LIC	212C1	Moorhead	MN	62.85	321.3	75.0	-12.15
981203 APP	208C3	Fargo	ND	78.05	308.7	89.0	-10.95
980427 APP	208A	Fargo	ND	62.72	321.6	72.0	-9.28
981201 APP	208C3	Horace	ND	80.88	311.8	89.0	-8.12
980427 APP	208A	Fargo	ND	79.17	313.2	72.0	7.17
960712 APP	207C1	Sebeka	MN	109.00	52.7	75.0	34.00
960328 APP	206C2	Waubun	MN	90.84	28.2	55.0	35.84
KBSB LIC	209A	Bemidji	MN	159.18	35.1	115.0	44.18
990518 APP	209C2	Princeton	MN	212.42	111.3	166.0	46.42
KSJRFM LIC	211C1	Collegeville	MN	151.36	126.7	75.0	76.36
KBPG.C CP	208A	Montevideo	MN	158.73	169.8	72.0	86.73

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## **Exhibit #22**

### **R.F. RADIATION COMPLIANCE STATEMENT**

KCMF  
Minor Modification to  
BMPED20020416AAC  
Minnesota Public Radio

Channel 209 – 2.7 kW Omni-Directional

August 2002

The applicant's proposed power is 2.7 kW, however another application is being filed to use the same antenna in diplex that will raise the total ERP to 5.4 kW. The proposed antenna will have a center of radiation of 54.9 meters above ground. Using the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, the proposed facility is predicted to produce a worst-case maximum R.F. non-ionization radiation level at a position six feet above the tower base (head level - based on the C.O.R. of 54.9 meters above ground minus 2 meters) of 128.94 microwatts per square centimeter. This figure is without regard for the antenna's vertical elevation field value toward the nadir, which will cause a reduction in the predicted "worst case" calculations. 128.94 microwatts per square centimeter is 12.89 percent of the maximum standard value for the frequency in use for a controlled area and 64.47 percent for an uncontrolled area.

Since "worst case" calculations were used and since it is well known that the actual RF power density level is considerably reduced at vertical angles toward the nadir the applicant is confident that there will be no exposure at the transmitter site greater than the maximum.

The applicant will protect workers on the tower by either reducing ERP or terminating transmission. A sign will be posted warning workers of the antenna, with a phone number to contact someone to reduce or terminate power.

Consequently, it appears that the proposed FM station will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.