DUPLICATE

Wiley, Rein & Fielding

1776 K Street, N.W.
Washington, D.C. 20006
(202) 719-7000

Fax: (202) 719-7049
www.wrf.com

Writer's Direct Dial

(202) 719-7351

March 16, 2000

RECEIVED
MAR 16 2000
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

By Hand

Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
12th Street Lobby, TW-A325
Washington, D.C. 20054

Re: Minnesota Public Radio
Application for New Noncommercial Educational FM Translator
Minneapolis, Minnesota

Dear Ms. Salas:

Transmitted herewith, in triplicate, on behalf of Minnesota Public Radio, is an application on FCC Form 349 for a construction permit for a new, noncommercial educational FM translator on Channel 220 at Minneapolis, Minnesota. This application does not require a filing fee.

Please contact the undersigned should you have any questions regarding this application

Respectfully submitted,

E. Joseph Knoll III

cc: James Crutchfield (by hand)
Mitzi T Gramling

860259

Federal Communications Commission
Washington, D. C. 20564

Approved by OMB
3060-0405
Expires 09/30/98

FOR FCC USE ONLY

FCC 349
APPLICATION FOR AUTHORITY TO CONSTRUCT
OR MAKE CHANGES IN AN FM TRANSLATOR OR FM BOOSTER STATION

FOR COMMISSION USE ONLY
FILE NO.

Section I - GENERAL INFORMATION

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

Minnesota Public Radio

MAILING ADDRESS (Line 1) (Maximum 35 characters)
45 East Seventh Street

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY	STATE OR COUNTRY (if foreign address)	ZIP CODE
Saint Paul	MN	55101

TELEPHONE NUMBER (include area code)	CALL LETTERS OR OTHER FCC IDENTIFIER (IF APPLICABLE)
651-290-1500	

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 1.1 1 1 2).

☐ 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 in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number listed in Column (B).

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

3. This application is for: (check one box):

☒ FM Translator ☐ FM Booster

A. Channel No.	B. Community of license: City	State
220	Minneapolis	MN

All previous editions obsolete.

FCC 349
December 1995

C. Check one of the following boxes:

☒ **NEW station**

See Ex #E1, Engineering Statement

☐ **MODIFICATION of Construction Permit (CP)**
(Check this box only if a license for this particular CP has not been granted)

File No. of Construction Permit: _____

☐ **MAJOR CHANGE in licensed facilities; call** _____

☐ **MINOR CHANGE in licensed facilities; call sign:** _____

☐ **AMENDMENT of pending application**

Application Reference No. _____

For amendments to a previously filed application, submit complete Form 349.

D. NATURE OF PROPOSED MODIFICATION, CHANGE OR AMENDMENT

☐ **Change Frequency**
☐ **Change Antenna System**
☐ **Change Power**
☐ **Relocate Station**
☐ **Change Equipment**
☐ **Other (specify in an Exhibit)**

Exhibit No. N/A

4. **(a) To the applicant's knowledge, is this application mutually exclusive with a renewal application?** ☐ Yes ☒ No

(b) To the applicant's knowledge, is this application mutually exclusive with another application? ☐ Yes ☒ No

If the answer to question 4(a) or 4(b) is Yes, state the following information:

Call Letters or File No.	Community of License	
	City	State
(a)		
(b)		

Section II - ENGINEERING DATA AND ANTENNA AND SITE INFORMATION

1. Facilities requested:

(a)

Output Channel No.	Frequency	Proposed Community(ies) To Be Served	
		City	State
220	91.9 MHz	Minneapolis	MN

Primary Station (station to be rebroadcast)

(b)

Call Sign	City	State	Output Channel No.	Frequency
KSJN	Minneapolis	MN	258	99.5 MHz

Intermediate translator station - if station is to operate via another translator station

(c)

Call Sign	City	State
N/A		

(d) Alternative Signal Delivery

☐ Satellite Feed ☐ Microwave ☐ Other ☒ Not Applicable

2. Proposed transmitting antenna location:

City	State	County
Minneapolis	MN	Hennepin

Address or other description of location:

Kenwood Water Tower
1716 Kenwood Parkway
Minneapolis, MN

Geographical coordinates of transmitting antenna to nearest second (see Instructions)

North Latitude			West Longitude		
44 °	58 '	03 "	93 °	18 '	23 "

Attach as an Exhibit a map or maps (such as the Geological Survey topographic quadrangle map) of the area of the proposed transmitting antenna location, showing thereon the following data:

Exhibit No. E2

a. Scale in kilometers
b. Proposed transmitting antenna location accurately plotted.

For applicants proposing changes that will result in change of coverage, include in this Exhibit the location of the proposed and existing transmitting antenna sites and the proposed and existing coverage contours. See 47 C.F.R. Section 74.1233(a).

	Make	Type No.		Output Power P
3. Transmitter:	TTC			.00359 kilowatts
4. Transmission Line:	Andrew	LDF4-50A	Length 20 meters	Rated efficiency E for length given(decimal fraction) .906

● Transmitting antenna [X] Directional "Off-the-shelf" (Submit Manufacturer's patterns & tabulations) [ ] Directional Composite (Multiple Antennas) (Submit Manufacturer's patterns & tabulations) [ ] Non-directional

Manufacturer	Model	Description 1/
Scala	CLFM	Cross Pol Yagi
Overall structure height above ground 2/	**Elevation of Site 3/**	**Power Gain G 4/**
33.5 meters	278 meters	H 4.0 / V 4.0

Effective radiated power (ERP) (ERP = P x E x G)
.013 kilowatts (H)
.013 kilowatts (V)

Height of antenna radiation center above ground level
9 meters (H)
9 meters (V)

above mean sea level
287 meters (H)
287 meters (V)

1/ Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.

2/ Show height to topmost portion of structure in meters, including highest top mounted antenna and beacon, if any.

3/ Show the ground elevation above mean sea level in meters at the base of the transmitting antenna supporting structure.

4/ Use the multiplier in lobe of maximum radiation relative to a halfwave dipole. Give the actual power gain toward the radio horizon.

● Attach as an Exhibit a vertical plane sketch for the proposed total structure(s), including supporting structure(s), giving height of center of radiation above ground, overall height of structure above ground, including lighting beacon (if any) and height above mean sea level in meters for all significant features for BOTH RECEIVING AND TRANSMITTING ANTENNAS. Also indicate any horizontal separation between receiving and transmitting antennas.

Exhibit No. E3

7. Will the proposed antenna supporting structure be shared with an AM radio station? [ ] Yes [X] No

If Yes, list the call sign(s) and class of such station(s).

8. Is a directional antenna proposed? [X] Yes [ ] No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Sections 73.316(c)(1)-(c)(3), including plot(s) and tabulations of the relative field. See Instructions for Section II - Engineering Data, paragraph (A).

Exhibit No. E4

9. Are there any terrain features between the proposed transmitting site and the community to be served which would interfere with line-of-sight transmission to any part of the principal community? [ ] Yes [X] No

If the answer is Yes, attach as an Exhibit a description of the extent of the area affected.

Exhibit No. N/A

●

10. Supply terrain and coverage data (to be calculated in accordance with 47 C.F.R. Section 73.313).

Source of terrain data: (check only one box below)

☐ Linearly interpolated 30-second database (Source _____)

☐ 7.5 minute topographic map

☒ Other (briefly summarize)
USGS 03 Sec, V-Soft Communications ROM

Radial bearing (degrees True) 1/		Average Elevation of Radial in meters (3 to 16 km) AMSL	Height of Radiation Center above average elevation of radial from 3 to 16 km (meters)	Predicted distance to the protected contours (0.5, 0.7 or 1.0 mV/m) 2/ (kilometers)
Booster	Translator			
0	0	*	*	*
45	30	*See Ex #E1, Pg #3	*	*
90	60	*	*	*
135	90			
180	120			
225	150			
270	180			
315	210			
	240			
	270			
	300			
	330			

1/ Additional radial(s) and related information should be provided when necesary to show interference protection.

2/ Protected contours vary depending on the class of station involved. Commercial Class B FM stations - protected contour 0.5 mV/m; Commercial Class B1 FM stations - protected contour 0.7 mV/m; all other classes of FM stations - protected contour 1 mV/m.

Based on the figures obtained from the above table, calculate the appropriate coverage contours of the translator station (see 47 C.F.R. Section 73.333) and answer questions 11 and 12.

11. Attach as an Exhibit a map (Sectional Aeronautical Chart or equivalent) that shows clearly, legibly and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. E5

(a) the proposed coverage contour; and

(b) the protected contour of the licensed primary station to be rebroadcast. (If the primary station is authorized with facilities in excess of those specified by 47 C.F.R. Section 73.211, see Note to 47 C.F.R. Section 74.1231(h).)

12. Based on the above, is the area to be served by the translator or booster station entirely within the primary station's protected contour? ☒ Yes ☐ No

13. Is the applicant specifying a channel that is 53 or 54 channels removed from the channel of any FM radio broadcast station in the area of operations? ☐ Yes ☒ No

If Yes, attach an Exhibit showing compliance with 47 C.F.R. Section 73.207.

Exhibit No. N/A*

(Translators will be treated as Class A stations provided, however, that translators operating with less than 100 watts ERP will be treated as Class D stations and will not be subject to I.F. frequency separation requirements. (See 47 C.F.R. Section 74.1204(g).)

*See Ex #E6 for Allocation Study

14. Does the applicant have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station? See 47 C.F.R. Section 74.1232(b). ☐ Yes ☒ No

If Yes, submit an Exhibit, showing the technical need for the additional translator. Exhibit No. N/A

15. For non-commercial educational applicants intending to operate on reserved channels 201-220, will the proposed operation be within the threshold distance of a TV Channel 6 station as set forth by 47 C.F.R. Section 74.1205(a)? ☐ Yes ☒ No

If Yes, submit an Exhibit showing compliance with paragraph (b), (c), or (d) of 47 C.F.R. Section 74.1205. Exhibit No. N/A

If applicant's compliance is based on 47 C.F.R. Section 74.1205(b), the applicant certifies that it has coordinated its antenna with the affected TV Channel 6 station. ☐ Yes ☐ No N/A

16. Has the FAA been notified of proposed construction? ☐ Yes ☒ No

If Yes, give date and office where notice was filed: _____

17. Environmental Statement (see 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact, including exposure to workers or the general public, to harmful nonionizing radiation levels? ☐ Yes ☒ No

If Yes, submit as an Exhibit an Environmental Assessment as required by 47 C.F.R. Section 1.1311. If No, explain briefly why not. Exhibit No. N/A

Existing authorized structure. Antenna ERP is less than 100 watts, so RF hazard statement is not required.

18. Unattended operation:

Is unattended operation proposed? ☒ Yes ☐ No

(a) If Yes, and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234 concerning unattended operation. ☒ Yes ☐ No

(b) In the space below state the name, address and telephone number of a person or persons who may be contacted in an emergency to suspend operation of the translator should such action be deemed necessary by the Commission.

Name	Minnesota Public Radio Network Control Center Operator (on duty 24 hours)	
Address (street or other description) 45 East Seventh St.		
City St. Paul	State MN	Telephone No. (include area code) 651 290-1500

9. Has the applicant proposed to use equipment that is type accepted or notified in accordance with the provisions of 47 C.F.R. Parts 73 and 74? [X] Yes [ ] No

If No, and the equipment is to be notified or type accepted under 47 C.F.R. Section 74.1250(c), include the date the equipment was submitted to the FCC Laboratory for approval or the date the manufacturer commenced the notification process. _____

CERTIFICATION

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.

Signature	Typed or Printed Name
Douglas L Vernier	Douglas L. Vernier
Date	**Telephone No. (include area code)**
March 14, 2000	319 266-8402

[ ] Technical Director [ ] Registered Professional Engineer [ ] Consulting Engineer

[ ] Chief Operator [X] Other (specify) Technical Consultant

Doug Vernier
1600 Picturesque Drive
Cedar Falls, Iowa 50613

Telecommunication Consultants

EXHIBIT #E1
ENGINEERING STATEMENT

Concerning the Application of
Minnesota Public Radio
To build a New FM Translator Station to Serve
Minneapolis, Minnesota

March, 2000

CH 220D 0.013 kW (DA)

This engineering statement supports the application of Minnesota Public Radio, St. Paul, Minnesota to build a new non-commercial educational FM fill-in translator station on channel 220 to serve an area of Minneapolis, Minnesota.

Under this proposal, the on-air audio signal from primary station KSJN, Channel 258, Minneapolis, will be delivered to a Television Technology, Inc. XL10FM translator unit. This translator unit generates an output power of 0.00359 kW on 91.9 MHz. The 50-ohm Andrew LDF4-50A, 1/2" Heliax, foam copper, coaxial transmission line, has an efficiency for its 20.0 meter length of 90.6 percent. Therefore, the proposed Scala CL-FM cross pol yagi antenna has at its input 0.00325 kilowatts of power. The antenna has a power gain of 4.0 resulting in an effective radiated power of 0.013 kW.

Exhibit #E2, is a full-scale site map section (Minneapolis South Quadrangle) showing the proposed translator station's antenna site location. Page #2 of this exhibit is a photo reduction, showing the map's corner edge markings.

Exhibit #E3, is a vertical sketch of the existing 33.5 meter water tower and the proposed transmit antenna at 9.0 meters above ground.

Exhibit #E4 is a composite pattern plot with tabulation in five degree increments of the proposed directional antenna pattern oriented at 160 degrees True North. Maximum ERP is 0.013 kW.

Exhibit #E5 is a Digital Line Graph map (U.S.G.S.) of the translator station's proposed one mV/m F(50-50) contour and the one mV/m (60 dBu) protected signal contour of the primary station KSJN at Minneapolis, MN.

Phone: (319) 266-8402 E-mail: dvernier@v-soft.com Fax: (319) 266-9212

A total of 12 evenly spaced radials were used to determine the antenna height above average terrain. The U.S.G.S. 03 arc second database was employed to determine the elevations along the radials that were averaged using the required four-point interpolation method. The resulting averaged radial antenna heights were employed using the Commission's own TVFMINT algorithm to project the distances to signal contours. A tabular listing of the distance to the one mV/m contour can be found on page #3 of this exhibit.

Exhibit #E6, is an allocation narrative and computer study. The allocation maps in this exhibit plot the interfering and protected signal contours at one-degree increments along relevant arcs of 120 degrees. The NGDC 03-arc-second point digital terrain database was used for all calculations. The Commission's own TVFMINT computer algorithm was used to project the signal distances using the input values of antenna height, power and desired signal level. There are no pertinent I.F. relationships. The proposed facility is not within 320 kilometers of the US Border with Canada or Mexico.

The closest channel-six station, KAAL, Austin is 149.3 kilometers from the proposed FM translator. The cutoff distance for FM translators on Channel 220 is 131 kilometers, therefore no channel-six exhibit is required.

Page #4 of **Exhibit #E1** is a statement of the qualifications of the preparer.

Doug Vernier

Doug Vernier Telecommunications Consultants
Minnesota Public Radio, Kenwood Translator
ERP = .013 kW
Channel = 220

Azimuth Deg.T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-50) Distance to 60 dBu Contour km
0	264.0	14.0	-34.778	1.61
30	277.2	.8	-35.938	1.61
60	280.6	-2.6	-33.707	1.61
90	264.9	13.1	-36.318	1.61
120	256.8	21.2	-24.408	2.48
150	250.5	27.5	-19.288	3.28
180	262.1	15.9	-20.110	3.13
210	272.7	5.3	-28.517	1.98
240	286.8	-8.8	-35.815	1.61
270	285.8	-7.8	-33.424	1.61
300	282.1	-4.1	-37.062	1.61
330	271.3	6.7	-33.659	1.61
Ave. =	271.2 M	6.8 M		

Antenna Radiation Center AMSL =278 M
NGDC 03 Arc Sec.

Geographic Coordinates:

N. Lat. 44 58 03
W. Lng. 93 18 23

Declaration:

I, Doug Vernier, declare that I have received training as an engineer from the University of Michigan School of Engineering. That, I have received degrees from the University in the field of Broadcast Telecommunications. That, I have been active in broadcast consulting for over 25 years;

That, I have held a Federal Communications Commission First Class Radiotelephone License continually since 1964. In 1985, this license was reissued by the Commission as a lifetime General Radiotelephone license no. PG-16-16464;

That, I am certified as a Professional Broadcast Engineer (#50258) by the Society of Broadcast Engineers, Indianapolis, Indiana. (Re-certified 11/95.)

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

That, I have been retained by Minnesota Public Radio, St. Paul, Minnesota, and as such have prepared the engineering showings appended hereto;

That, a portion of the exhibits contained herein were prepared under my supervision by Kate Michler, Associate;

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

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

Douglas L. Vernier

Executed on March 14, 2000

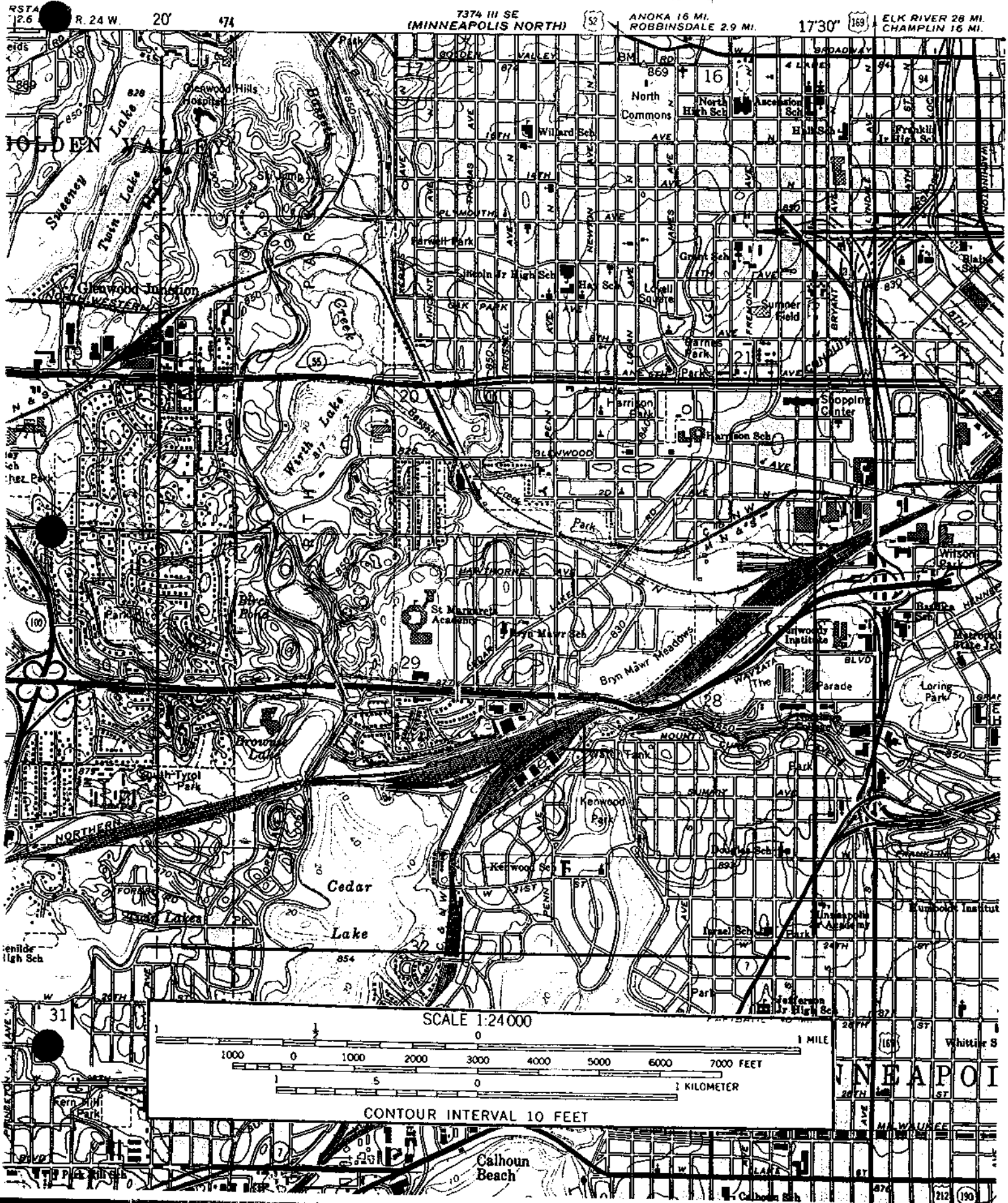
Subscribed and sworn before me this 14th day of March, 2000.

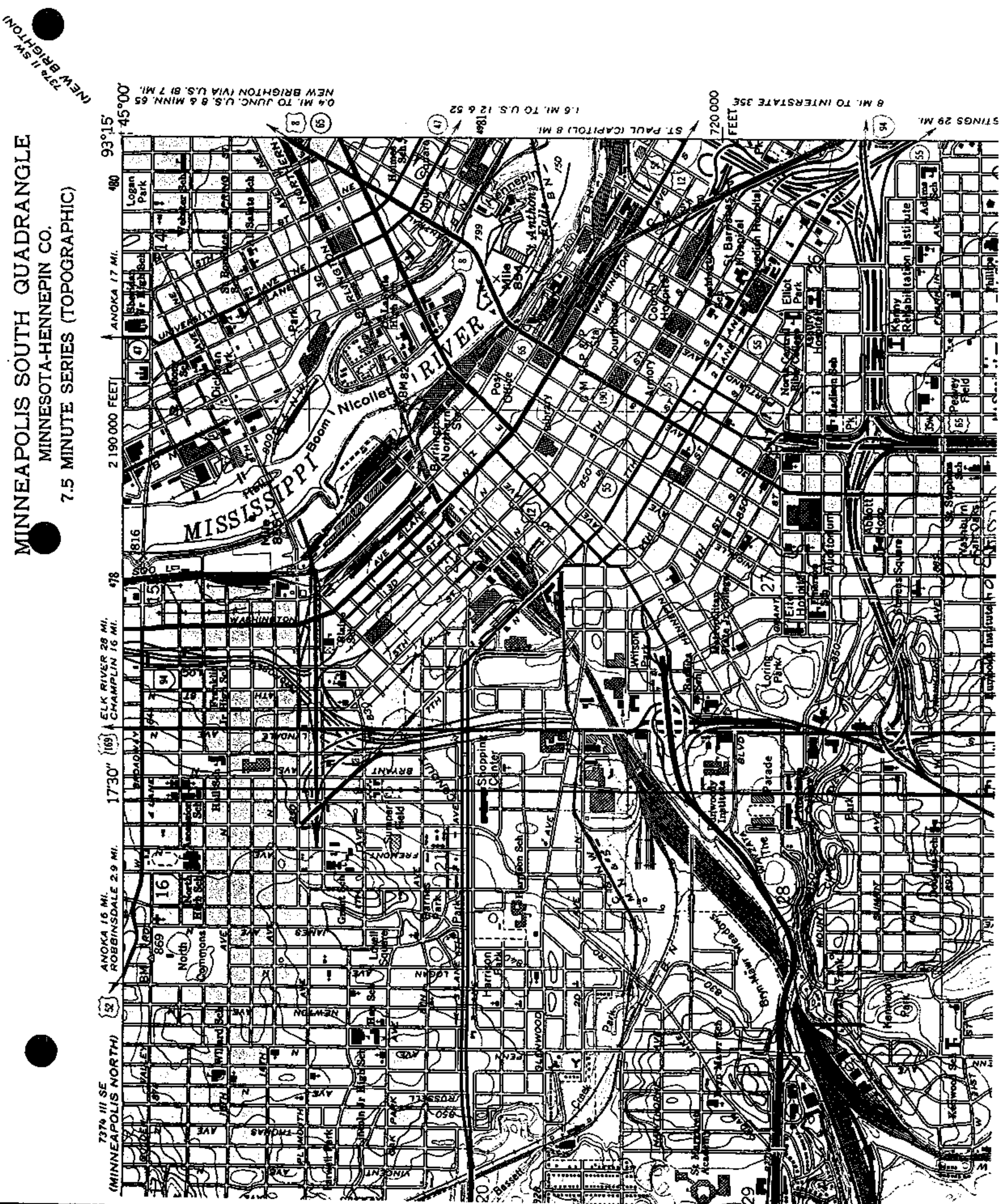
Notary Public in and for the State of Iowa

My Commission Expires August 10, 2001

MINNEAPOLIS SOUTH QUADRANGLE
MINNESOTA-HENNEPIN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

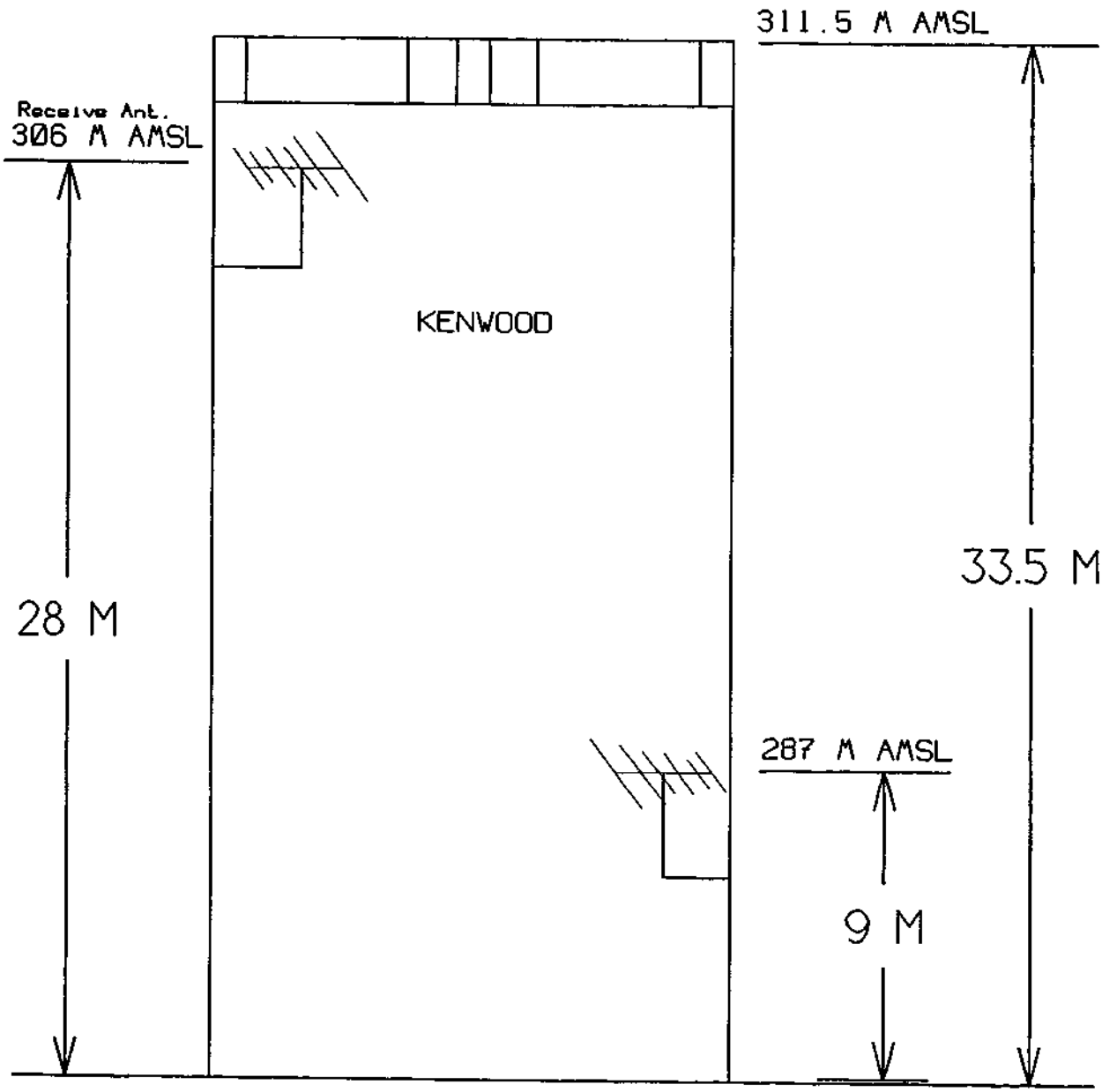
Ex #E2, Site Map




MINNEAPOLIS SOUTH QUADRANGLE
MINNESOTA-HENNEPIN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
MISSISSIPPI RIVER

M.P.R Translator

Ex # E3



ELEVATION = 278 M

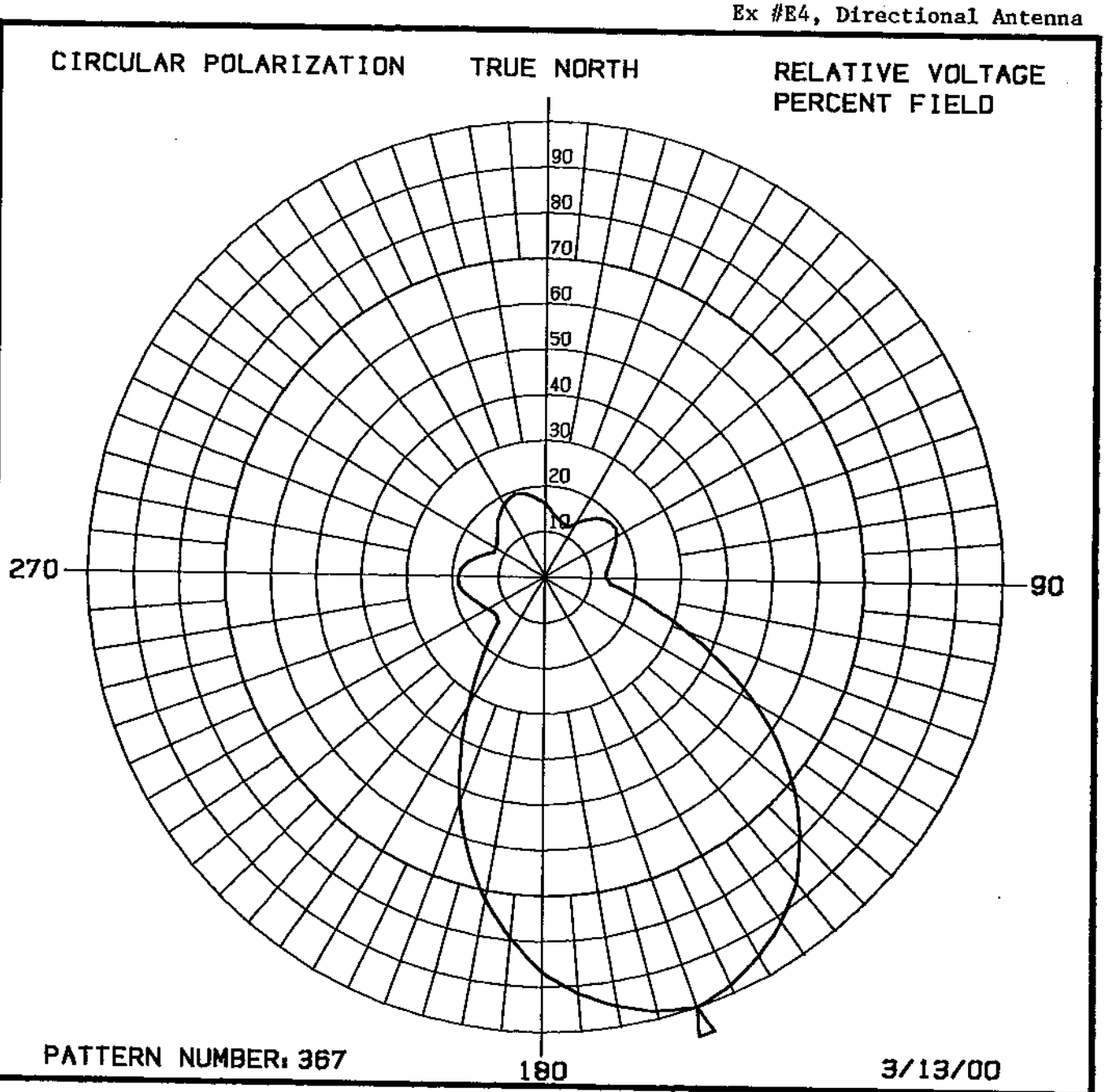
Minnesota Public Radio

MINNEAPOLIS. MINNESOTA

CH 220 - .013 kW ERP

Doug Vernier

(Not to Scale)



Minnesota Public Radio
Scala CLFM
Oriented 160 degrees True

Doug Vernier Telecommunications Consultants
1600 Picturesque Drive
Cedar Falls, IA 50613

Pattern #367

Minnesota Public Radio
Scala CLFM
Oriented 160 degrees True

Doug Vernier Telecommunications Consultants
1600 Picturesque Drive
Cedar Falls, IA 50613

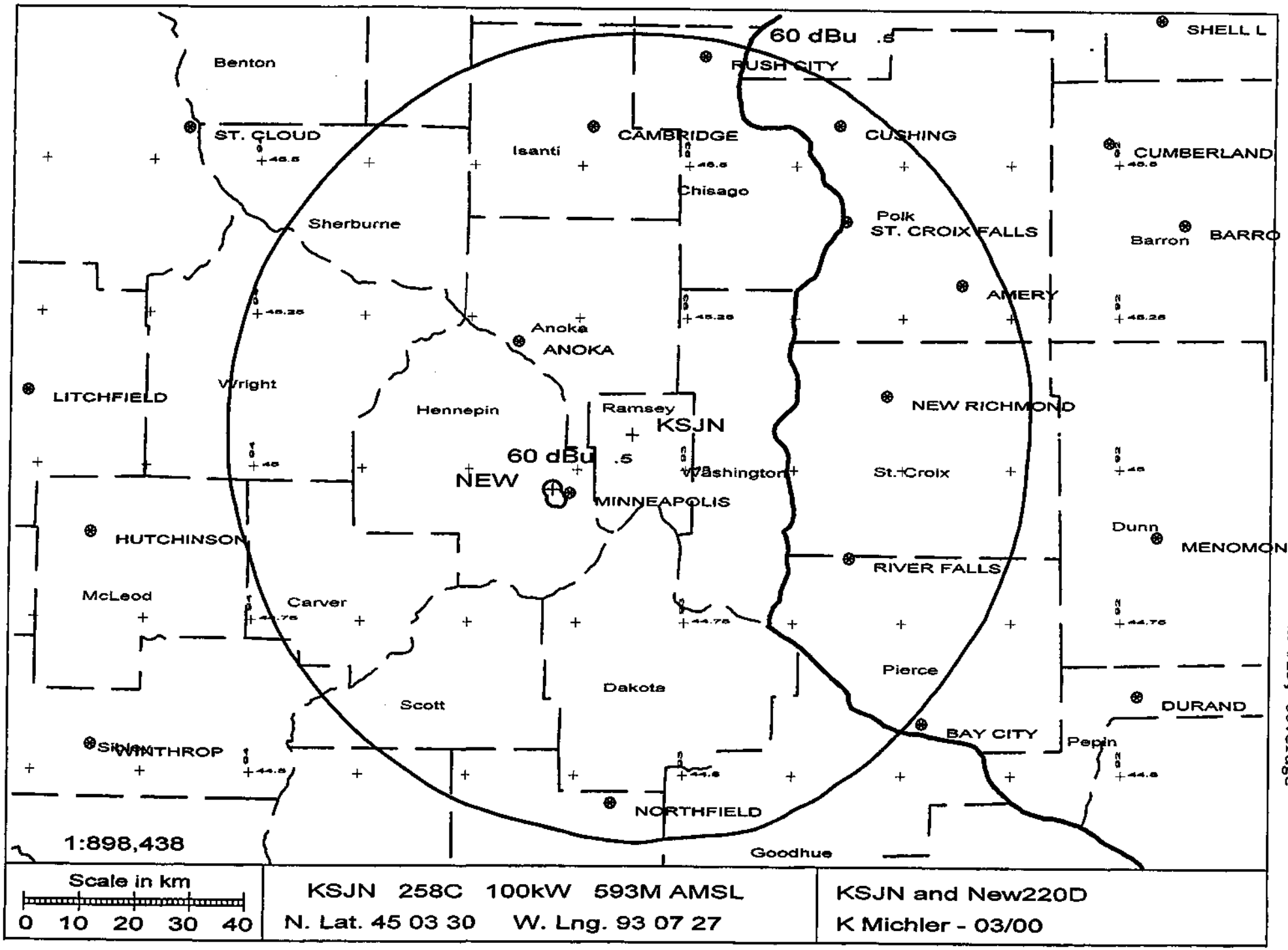
Azimuth	Relative Voltage	dBK	ERP
0	0.160	-34.8	0.33w
5	0.145	-35.6	0.27w
10	0.135	-36.3	0.24w
15	0.127	-36.8	0.21w
20	0.123	-37.1	0.20w
25	0.123	-37.1	0.20w
30	0.140	-35.9	0.25w
35	0.155	-35.1	0.31w
40	0.171	-34.2	0.38w
45	0.183	-33.6	0.44w
50	0.187	-33.4	0.45w
55	0.189	-33.3	0.46w
60	0.181	-33.7	0.43w
65	0.170	-34.3	0.38w
70	0.157	-34.9	0.32w
75	0.150	-35.3	0.29w
80	0.142	-35.8	0.26w
85	0.135	-36.3	0.24w
90	0.134	-36.3	0.23w
95	0.142	-35.8	0.26w
100	0.190	-33.3	0.47w
105	0.247	-31.0	0.79w
110	0.329	-28.5	1.41w
115	0.423	-26.3	2.33w
120	0.528	-24.4	3.62w
125	0.628	-22.9	5.13w
130	0.718	-21.7	6.70w
135	0.796	-20.8	8.24w
140	0.866	-20.1	9.75w
145	0.915	-19.6	10.9w
150	0.952	-19.3	11.8w
155	0.982	-19.0	12.5w
160	1.000	-18.9	13.0w
165	0.982	-19.0	12.5w
170	0.952	-19.3	11.8w
175	0.915	-19.6	10.9w

Pattern #367

Minnesota Public Radio
Scala CLFM
Oriented 160 degrees True

Doug Vernier Telecommunications Consultants
1600 Picturesque Drive
Cedar Falls, IA 50613

Azimuth	Relative Voltage	dBK	ERP
180	0.866	-20.1	9.75w
185	0.796	-20.8	8.24w
190	0.718	-21.7	6.70w
195	0.628	-22.9	5.13w
200	0.528	-24.4	3.62w
205	0.423	-26.3	2.33w
210	0.329	-28.5	1.41w
215	0.247	-31.0	0.79w
220	0.190	-33.3	0.47w
225	0.142	-35.8	0.26w
230	0.134	-36.3	0.23w
235	0.135	-36.3	0.24w
240	0.142	-35.8	0.26w
245	0.150	-35.3	0.29w
250	0.157	-34.9	0.32w
255	0.170	-34.3	0.38w
260	0.181	-33.7	0.43w
265	0.189	-33.3	0.46w
270	0.187	-33.4	0.45w
275	0.183	-33.6	0.44w
280	0.171	-34.2	0.38w
285	0.155	-35.1	0.31w
290	0.140	-35.9	0.25w
295	0.123	-37.1	0.20w
300	0.123	-37.1	0.20w
305	0.127	-36.8	0.21w
310	0.135	-36.3	0.24w
315	0.145	-35.6	0.27w
320	0.160	-34.8	0.33w
325	0.170	-34.3	0.38w
330	0.182	-33.7	0.43w
335	0.188	-33.4	0.46w
340	0.193	-33.1	0.48w
345	0.188	-33.4	0.46w
350	0.182	-33.7	0.43w
355	0.170	-34.3	0.38w



Ex #E5, Coverage

Ex #E6, Allocation Study

Allocation narrative:

Minnesota Public Radio

The channel study on page #2 of this exhibit shows that the proposed application meets all contour overlap requirements of section 74.1204 with one exception. The proposed channel will cause a 3rd adjacent overlap with station KQRS, Golden Valley. However, when using the FCC signal prediction method the signal strength of KQRS is evaluated at the proposed translator site to be 91 dBu. Using the U/D ratio for 3rd adjacent relationships the interfering signal would have to be 91 + 40 dBu or 131 dBu before interference is caused.

On July 9, 1999, Ralph Hornberger, Engineering Director of Minnesota Public Radio, carried out a site survey at the proposed water tower site. Actual distances to the nearest buildings were carefully measured.

Using the proposed directional pattern the radiated powers in the direction of the nearest buildings were calculated and applied to determine the actual distance to the 131 dBu interfering signal contour:

a.) Distance to the nearest building to the west/south west 21.3 meters
DA power .00045 kW, Distance to 131 dBu = 1.33 meters

b.) Distance to nearest building to the east = 12.19 meters
DA power = .0013 kW, Distance to 131 dBu = 2.25 meters

c.) Distance to buildings north and south (none in immediate vicinity)

Consequently, the 131 dBu interfering signal is very small and will not reach the ground. Therefore, this proposal qualifies under section 74.1204 (d) where no population is within the 3rd adjacent interference area.

Page 3 of this exhibit is a description of the methods used in preparing this study. Pages 4-11 include allocation maps and tabular FMOVER presentations showing the contour relationship with co-channel stations K220EG, including its recent change application, Bloomington, co-channel application at Medina and first adjacent station WMCN, St. Paul, Minnesota. No outgoing contour overlap appears with relationship to these stations.

Doug Vernier Telecommunications Consultants
1600 Picturesque Dr. Cedar Falls IA 50613

Kenwood Translator
Minnesota Public Radio

REFERENCE
[redacted] 58 03 N
[redacted] 18 23 W

CH# 220D - 91.9 MHz, Pwr= 0.013 kW, HAAT=15.8 M, COR= 287 M
Average Protected F(50-50)= 3.36 km
Ave. F(50-10) 40 dBu= 10.8 54 dBu= 4.8 80 dBu= 2.5 100 dBu= .3

DISPLAY DATES
DATA 03-11-00
SEARCH 03-14-00

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*
223C	*KQRS-F	C	70.4	2.86	44 58 34	36.500	519	57.4	-7.87	-54.56
Golden Valley		MN	250.4	BMLH19990929ABQ	93 16 20	235	6.8	Kqrs, Inc.		
> Reference HAAT at 70.4°= 4.7 M, Pwr= 0.00032 kW, Pro. Dist. = 3.96 km, Int Dist. = 0.04 km										
223C	*KQRS-F	LIC CN	54.7	17.56	45 03 30	100.000	593	73.7	2.51	-56.16
Golden Valley		MN	234.7	BLH19910814KB	93 07 27	317	10.4	Kqrs, Inc.		
> Reference HAAT at 54.7°= 8.1 M, Pwr= 0.00044 kW, Pro. Dist. = 4.66 km, Int Dist. = 0.05 km										
220D	*K220EG	C	175.8	17.77	44 48 29	0.216	270	6.8	-8.30	0.63
Bloomington		MN	355.8	BPFT20000216AAR	93 17 23	10	22.9	North-central Christian Br		
> Reference HAAT at 175.8°= 27.4 M, Pwr= 0.01057 kW, Pro. Dist. = 3.2 km, Int Dist. = 10.3 km										
220D	*K220EG	CN	175.8	17.77	44 48 29	0.009	270	3.1	4.68	4.40
Bloomington		MN	355.8	BLFT19950403TB	93 17 23	10	9.9	North-central Christian Br		
> Reference HAAT at 175.8°= 27.4 M, Pwr= 0.01057 kW, Pro. Dist. = 3.2 km, Int Dist. = 10.3 km										
220D	*NEW.A	DV	294.4	22.81	45 03 06	0.041	404	8.6	-9.43	10.31
Medina		MN	114.4	BNPFT19991104AAD	93 34 13	110	28.9	Pensacola Christian Colleg		
> Reference HAAT at 294.4°= 2.8 M, Pwr= 0.00023 kW, Pro. Dist. = 3.35 km, Int Dist. = 3.86 km										
219D	*WMCN	LIC CN	105.9	11.37	44 56 22	0.008	306	3.4	4.75	5.45
St. Paul		MN	285.9	BLED19791015AA	93 10 04	39	4.8	Macalester College		
> Reference HAAT at 105.9°= 27.0 M, Pwr= 0.00096 kW, Pro. Dist. = 1.8 km, Int Dist. = 2.51 km										
220C3	KBHZ	LIC CN	272.8	125.68	45 00 40	25.000	445	39.1	8.68	75.77
Willmar		MN	92.8	BLED19960228KB	94 53 56	100	113.6	Christian Heritage Broadca		
219C1	KLSE-F	LIC CN	143.0	128.45	44 02 28	94.000	638	70.8	22.06	52.90
Rochester		MN	323.0	BLED19980504KG	92 20 25	288	103.0	Minnesota Public Radio		
218C2	KNGA	LIC VN	218.1	104.91	44 13 20	8.500	471	40.3	88.15	62.04
St. Peter		MN	38.1	BLED19920303KA	94 07 03	183	13.4	Minnesota Public Radio		
[redacted]8C3	AVAC	N	309.3	94.38	45 30 02	25.000	0	39.1	78.15	52.77
St. Cloud		MN	129.3		94 14 31	100	12.9	Minnesota Christian B/cast		
218C3	KCFB.C	CP CN	309.3	94.38	45 30 02	15.000	435	36.0	79.32	55.87
St. Cloud		MN	129.3	BPED19980410MC	94 14 31	106	11.7	Minnesota Christian B/cast		
221C3	KRUE	LIC CN	183.5	102.61	44 02 45	25.000	438	36.8	41.63	61.09
Waseca		MN	3.5	BLH19920727KA	93 23 08	87	57.6	Cumulus Licensing Corporat		
221C2	WMEQ-F	CP CN	92.0	127.03	44 54 59	17.500	512	49.4	50.67	72.85
Menomonie		WI	272.0	BMPH19990524IB	91 41 55	219	73.0	Cumulus Licensing Corp.		
218A	KCFB	LIC CN	316.9	96.58	45 35 54	0.800	357	10.6	89.91	83.47
St. Cloud		MN	136.9	BLED19910822KA	94 09 11	37	3.3	Minnesota Christian B/cast		
06-2C	KAAL	LI HN	175.3	149.30	43 37 42	100.000	696	105.1	To Grd B=	44.16
AUSTIN		MN	355.3	BLCT2236	93 09 12	320	0.0	GRAPEVINE OF AUSTIN LICENS		

* = ERP and HAAT on direct line to and from reference station.

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.

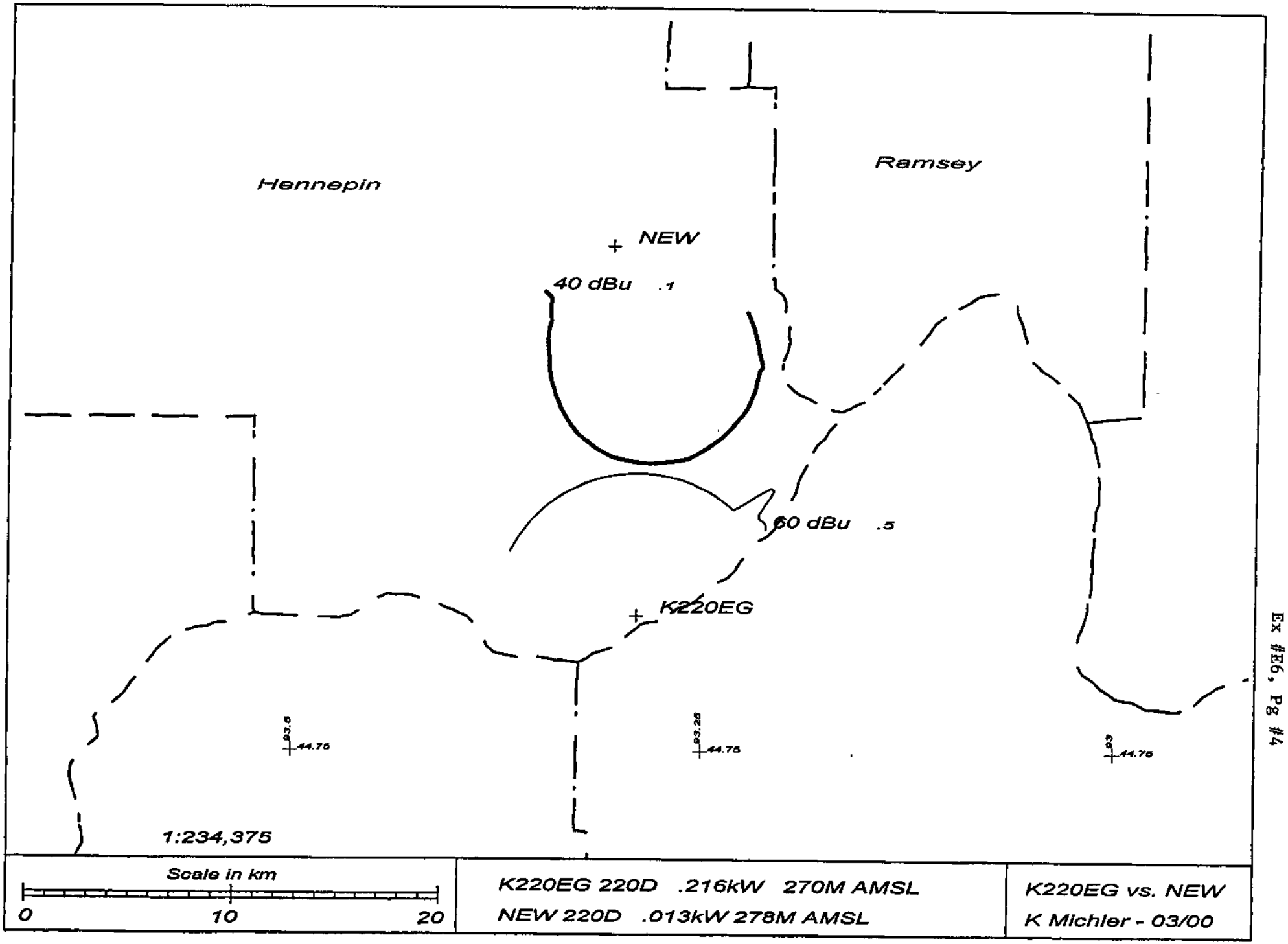
The column listed "* IN *" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 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 along the azimuths between the reference station and the database station are used and visa versa. The column labeled "* OUT *" shows the distance of 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 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" or "Z" (Sec. 73.215) if the facility is directional. 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.


Hennepin
Ramsey
NEW
40 dBu .1
60 dBu .5
K220EG
93.6
44.75
93.25
44.75
93
44.75
1:234,375
Scale in km
0
10
20
K220EG 220D .216kW 270M AMSL
NEW 220D .013kW 278M AMSL
K220EG vs. NEW
K Michler - 03/00

Ex #E6, Pg #4

Doug Vernier Telecom Consultants
03-14-2000 03 Sec. Terrain Data

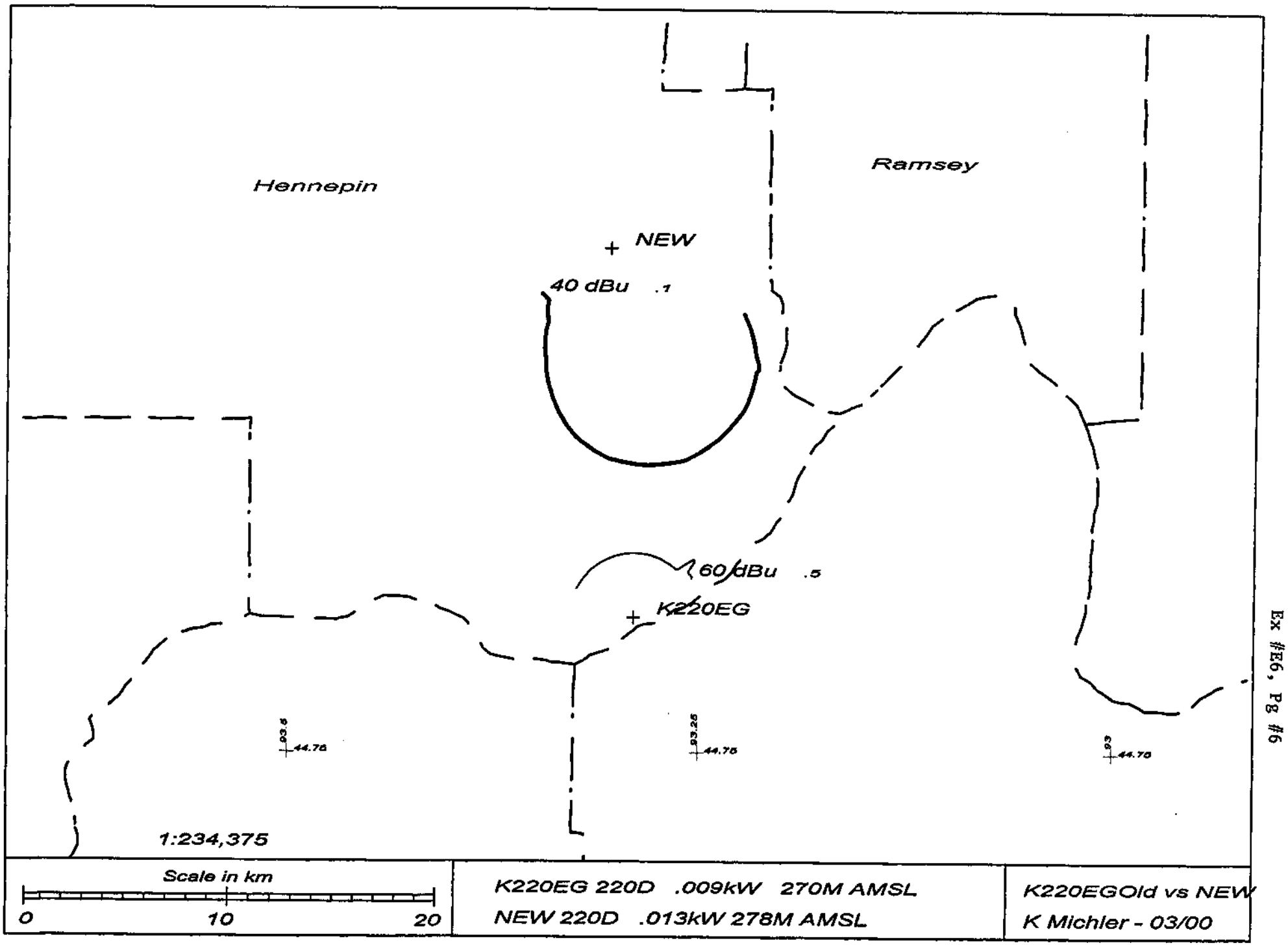
K220EG BPFT20000216AAR
Channel = 220D
Max ERP = 0.216 kW
RCAMSL = 270 M
N. Lat = 44 48 29
W. Lng = 93 17 23

NEW
Channel = 220D
Max ERP = 0.013 kW
RCAMSL = 278 M
N. Lat = 445803
W. Lng = 931823

Protected
60 dBu

Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
345.0	000.2160	0002.1	006.8	182.3	000.0090	0016.5	011.1	37.9
346.0	000.2160	0002.5	006.8	181.7	000.0092	0016.4	011.1	38.1
347.0	000.2160	0003.1	006.8	181.1	000.0094	0016.4	011.1	38.2
348.0	000.2160	0003.9	006.8	180.5	000.0096	0016.0	011.0	38.3
349.0	000.2160	0004.6	006.8	179.9	000.0098	0015.9	011.0	38.5
350.0	000.2160	0005.5	006.8	179.3	000.0099	0016.4	011.0	38.5
351.0	000.2160	0007.2	006.8	178.7	000.0100	0017.0	011.0	38.6
352.0	000.2160	0008.1	006.8	178.1	000.0101	0017.6	011.0	38.7
353.0	000.2160	0009.1	006.8	177.5	000.0102	0018.2	010.9	38.8
354.0	000.2160	0009.8	006.8	176.9	000.0104	0018.7	010.9	38.8
355.0	000.2160	0009.9	006.8	176.2	000.0105	0018.9	010.9	38.9
356.0	000.2160	0009.5	006.8	175.6	000.0106	0018.8	010.9	38.9
357.0	000.2160	0008.3	006.8	175.0	000.0107	0018.5	010.9	39.0
358.0	000.2160	0008.2	006.8	174.4	000.0108	0018.2	010.9	39.0
359.0	000.2160	0008.1	006.8	173.7	000.0110	0017.9	010.9	39.1
000.0	000.2160	0007.8	006.8	173.1	000.0111	0017.5	011.0	39.1
001.0	000.2160	0007.5	006.8	172.5	000.0112	0016.9	011.0	39.1
002.0	000.2160	0006.8	006.8	171.9	000.0113	0016.6	011.0	39.1
003.0	000.2160	0006.7	006.8	171.3	000.0115	0016.5	011.0	39.1
004.0	000.2160	0007.4	006.8	170.7	000.0116	0016.5	011.0	39.1
005.0	000.2160	0008.5	006.8	170.1	000.0117	0016.6	011.1	39.1
006.0	000.2160	0009.5	006.8	169.5	000.0118	0016.6	011.1	39.1
007.0	000.2160	0010.0	006.8	168.9	000.0119	0016.7	011.1	39.1
008.0	000.2160	0010.3	006.8	168.3	000.0119	0016.9	011.2	39.1
009.0	000.2160	0010.4	006.8	167.8	000.0120	0017.2	011.2	39.0
010.0	000.2160	0010.3	006.8	167.2	000.0121	0017.4	011.3	39.0
011.0	000.2160	0009.9	006.8	166.6	000.0122	0017.6	011.3	38.9
012.0	000.2160	0009.8	006.8	166.1	000.0122	0017.8	011.4	38.9
013.0	000.2160	0010.5	006.8	165.6	000.0123	0017.9	011.4	38.8
014.0	000.2160	0011.1	006.8	165.0	000.0124	0017.8	011.5	38.7
015.0	000.2160	0012.0	006.8	164.5	000.0124	0017.8	011.5	38.7
016.0	000.2160	0012.3	006.8	164.0	000.0125	0018.4	011.6	38.6
017.0	000.2160	0012.5	006.8	163.5	000.0125	0019.0	011.7	38.5
018.0	000.2160	0013.1	006.8	163.0	000.0126	0019.5	011.7	38.4
019.0	000.2160	0013.5	006.8	162.6	000.0127	0019.8	011.8	38.3


Hennepin
Ramsey
NEW
40 dBu .1
60 dBu .5
K220EG
93.6
44.76
93.25
44.76
44.76
1:234,375
Scale in km
0
10
20
K220EG 220D .009kW 270M AMSL
NEW 220D .013kW 278M AMSL
K220EGOld vs NEW
K Michler - 03/00

Ex #E6, Pg #6

Doug Vernier Telecom Consultants
03-14-2000 03 Sec. Terrain Data

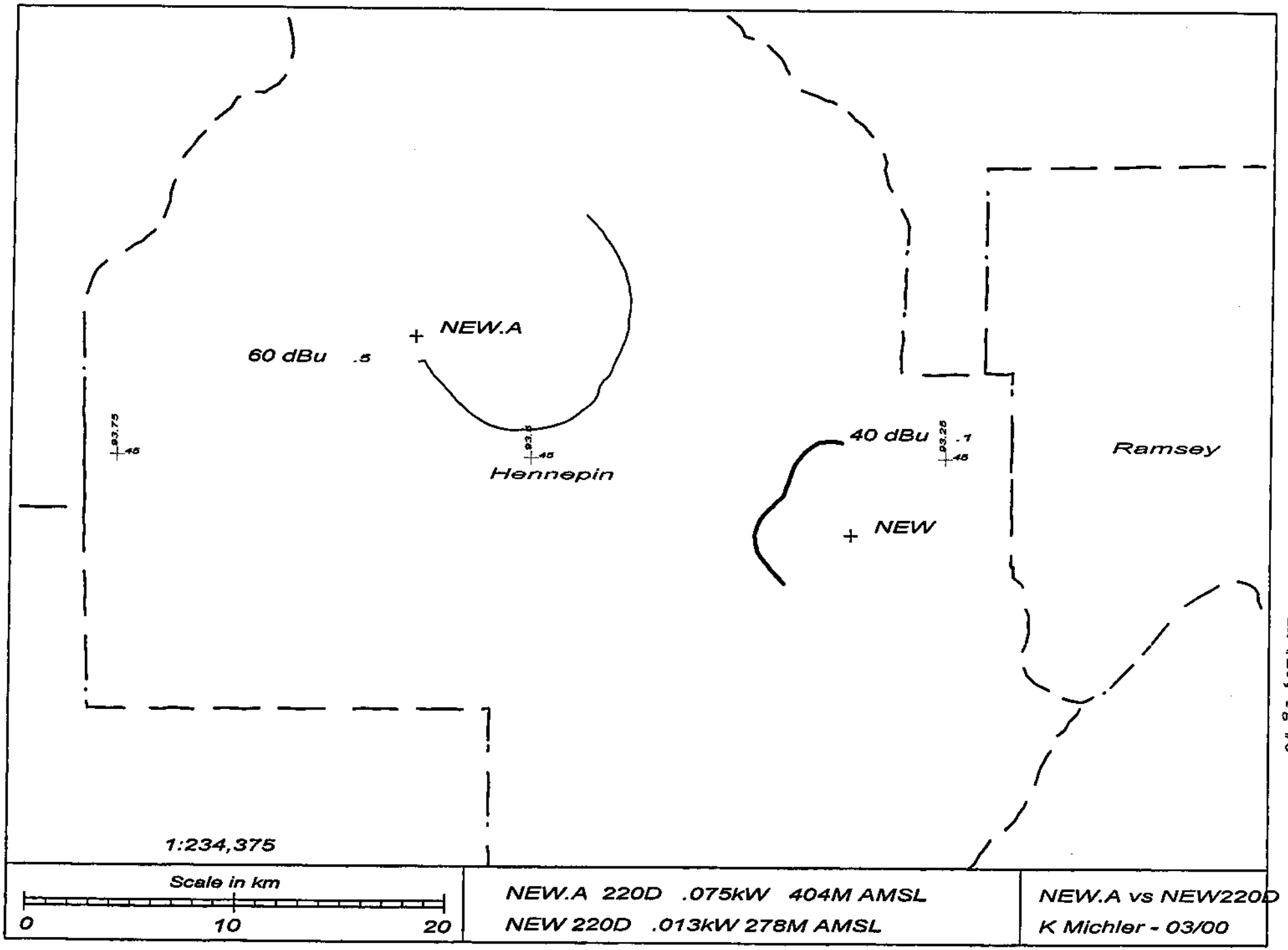
K220EG BLFT19950403TB
Channel = 220D
Max ERP = 0.009 kW
RCAMSL = 270 M
N. Lat = 44 48 29
W. Lng = 93 17 23

NEW
Channel = 220D
Max ERP = 0.013 kW
RCAMSL = 278 M
N. Lat = 445803
W. Lng = 931823

Protected
60 dBu

Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
345.0	000.0090	0002.1	003.1	178.0	000.0101	0017.7	014.8	33.3
346.0	000.0090	0002.5	003.1	177.8	000.0102	0017.9	014.8	33.4
347.0	000.0090	0003.1	003.1	177.6	000.0102	0018.1	014.7	33.4
348.0	000.0090	0003.9	003.1	177.4	000.0103	0018.4	014.7	33.4
349.0	000.0090	0004.6	003.1	177.2	000.0103	0018.6	014.7	33.4
350.0	000.0090	0005.5	003.1	177.0	000.0103	0018.7	014.7	33.5
351.0	000.0090	0007.2	003.1	176.7	000.0104	0018.8	014.7	33.5
352.0	000.0090	0008.1	003.1	176.5	000.0104	0018.8	014.7	33.5
353.0	000.0090	0009.1	003.1	176.3	000.0105	0018.8	014.7	33.5
354.0	000.0090	0009.8	003.1	176.1	000.0105	0018.9	014.7	33.6
355.0	000.0090	0009.9	003.1	175.9	000.0105	0018.9	014.7	33.6
356.0	000.0090	0009.5	003.1	175.7	000.0106	0018.8	014.7	33.6
357.0	000.0090	0008.3	003.1	175.5	000.0106	0018.7	014.7	33.6
358.0	000.0090	0008.2	003.1	175.3	000.0107	0018.6	014.7	33.6
359.0	000.0090	0008.1	003.1	175.1	000.0107	0018.5	014.7	33.6
000.0	000.0090	0007.8	003.1	174.9	000.0107	0018.5	014.7	33.7
001.0	000.0090	0007.5	003.1	174.7	000.0108	0018.4	014.7	33.7
002.0	000.0090	0006.8	003.1	174.5	000.0108	0018.2	014.7	33.7
003.0	000.0090	0006.7	003.1	174.3	000.0109	0018.1	014.7	33.7
004.0	000.0090	0007.4	003.1	174.1	000.0109	0018.1	014.7	33.7
005.0	000.0090	0008.5	003.1	173.8	000.0109	0017.9	014.7	33.7
006.0	000.0090	0009.5	003.1	173.6	000.0110	0017.8	014.8	33.7
007.0	000.0090	0010.0	003.1	173.4	000.0110	0017.7	014.8	33.7
008.0	000.0090	0010.3	003.1	173.2	000.0111	0017.6	014.8	33.7
009.0	000.0090	0010.4	003.1	173.0	000.0111	0017.4	014.8	33.7
010.0	000.0090	0010.3	003.1	172.8	000.0111	0017.2	014.8	33.7
011.0	000.0090	0009.9	003.1	172.6	000.0112	0017.0	014.8	33.7
012.0	000.0090	0009.8	003.1	172.5	000.0112	0016.9	014.8	33.7
013.0	000.0090	0010.5	003.1	172.3	000.0113	0016.8	014.9	33.7
014.0	000.0090	0011.1	003.1	172.1	000.0113	0016.7	014.9	33.7
015.0	000.0090	0012.0	003.1	171.9	000.0113	0016.6	014.9	33.7
016.0	000.0090	0012.3	003.1	171.7	000.0114	0016.6	014.9	33.7
017.0	000.0090	0012.5	003.1	171.5	000.0114	0016.5	015.0	33.6
018.0	000.0090	0013.1	003.1	171.3	000.0115	0016.5	015.0	33.6
019.0	000.0090	0013.5	003.1	171.1	000.0115	0016.5	015.0	33.6


NEW.A
60 dBu .5
93.75
45
93.5
45
Hennepin
40 dBu
93.25
.1
45
NEW
Ramsey
1:234,375
Scale in km
0
10
20
NEW.A 220D .075kW 404M AMSL
NEW 220D .013kW 278M AMSL
NEW.A vs NEW220D
K Michler - 03/00

Ex #E6, Pg #8

Doug Vernier Telecom Consultants
03-14-2000 03 Sec. Terrain Data

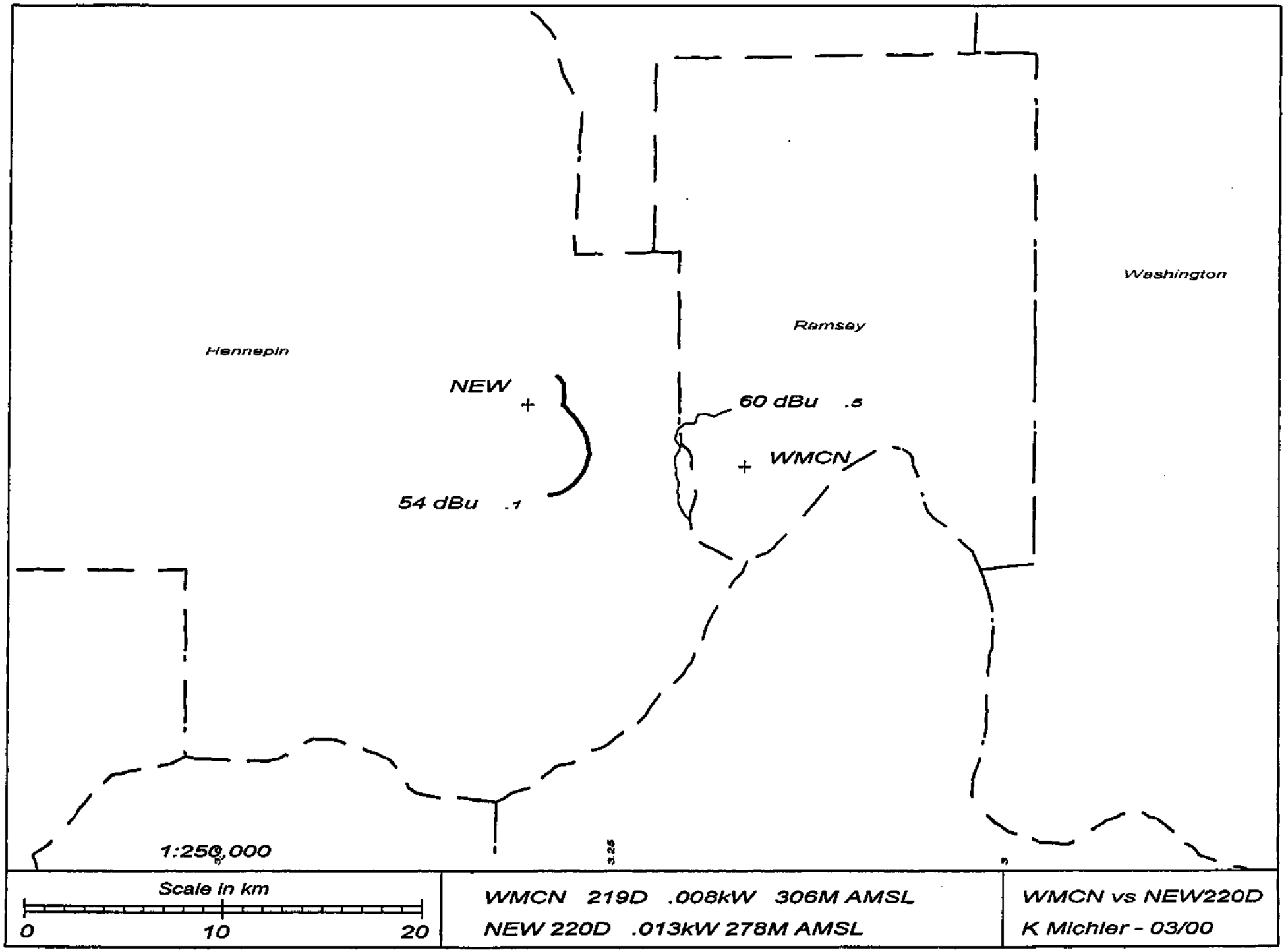
NEW.A BNPFT19991104AAD
Channel = 220D
Max ERP = 0.075 kW
RCAMSL = 404 M
N. Lat = 45 03 06
W. Lng = 93 34 13

NEW
Channel = 220D
Max ERP = 0.013 kW
RCAMSL = 278 M
N. Lat = 445803
W. Lng = 931823

Protected
60 dBu

Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
097.0	000.0612	0109.6	009.6	306.0	000.0002	-0008.0	014.0	17.7
098.0	000.0603	0109.2	009.5	305.3	000.0002	-0008.7	013.9	17.7
099.0	000.0594	0109.1	009.5	304.6	000.0002	-0008.9	013.9	17.7
100.0	000.0585	0109.7	009.5	304.0	000.0002	-0009.3	013.8	17.7
101.0	000.0572	0109.4	009.4	303.3	000.0002	-0009.4	013.8	17.6
102.0	000.0559	0108.2	009.3	302.5	000.0002	-0008.2	013.9	17.5
103.0	000.0546	0106.9	009.2	301.7	000.0002	-0006.6	013.9	17.4
104.0	000.0534	0106.2	009.1	301.0	000.0002	-0005.3	013.9	17.3
105.0	000.0522	0106.7	009.1	300.3	000.0002	-0004.5	013.9	17.3
106.0	000.0509	0107.8	009.1	299.7	000.0002	-0003.7	013.9	17.3
107.0	000.0497	0109.4	009.1	299.1	000.0002	-0003.0	013.9	17.4
108.0	000.0486	0110.5	009.1	298.4	000.0002	-0002.7	013.8	17.5
109.0	000.0474	0111.2	009.0	297.7	000.0002	-0002.7	013.8	17.6
110.0	000.0462	0111.6	009.0	297.1	000.0002	-0003.3	013.9	17.7
111.0	000.0449	0111.4	008.9	296.4	000.0002	-0004.3	013.9	17.7
112.0	000.0436	0110.7	008.8	295.7	000.0002	-0005.2	014.0	17.7
113.0	000.0423	0109.8	008.7	295.1	000.0002	-0006.2	014.1	17.6
114.0	000.0411	0109.3	008.6	294.5	000.0002	-0006.7	014.2	17.6
115.0	000.0399	0109.6	008.6	293.9	000.0002	-0006.8	014.2	17.6
116.0	000.0386	0109.6	008.5	293.3	000.0002	-0006.8	014.3	17.5
117.0	000.0374	0109.6	008.5	292.7	000.0002	-0006.7	014.4	17.5
118.0	000.0363	0109.5	008.4	292.1	000.0002	-0006.5	014.5	17.5
119.0	000.0351	0109.0	008.3	291.6	000.0002	-0006.3	014.6	17.4
120.0	000.0340	0108.2	008.2	291.1	000.0002	-0006.2	014.7	17.3
121.0	000.0324	0107.4	008.1	290.6	000.0003	-0006.2	014.8	17.2
122.0	000.0309	0106.7	007.9	290.2	000.0003	-0006.3	015.0	17.1
123.0	000.0294	0106.2	007.8	289.8	000.0003	-0006.5	015.1	17.0
124.0	000.0279	0105.3	007.7	289.4	000.0003	-0006.8	015.3	16.9
125.0	000.0265	0104.3	007.5	289.1	000.0003	-0007.0	015.5	16.9
126.0	000.0251	0103.6	007.4	288.7	000.0003	-0007.0	015.6	16.8
127.0	000.0237	0102.8	007.3	288.4	000.0003	-0007.0	015.8	16.7
128.0	000.0224	0102.1	007.2	288.2	000.0003	-0006.9	015.9	16.6
129.0	000.0211	0101.0	007.0	287.9	000.0003	-0006.8	016.1	16.5
130.0	000.0199	0100.0	006.9	287.7	000.0003	-0006.7	016.3	16.4
131.0	000.0183	0099.4	006.8	287.5	000.0003	-0006.6	016.5	16.3


Washington
Ramsey
Hennepin
NEW
60 dBu .5
WMCN
54 dBu .1
1:250,000
Scale in km
0
10
20
WMCN 219D .008kW 306M AMSL
NEW 220D .013kW 278M AMSL
WMCN vs NEW220D
K Michler - 03/00

Ex #E6, Pg #10

Doug Vernier Telecom Consultants
03-14-2000 03 Sec. Terrain Data

WMCN BLED19791015AA
Channel = 219D
Max ERP = 0.008 kW
RCAMSL = 306 M
N. Lat = 44 56 22
W. Lng = 93 10 04

NEW
Channel = 220D
Max ERP = 0.013 kW
RCAMSL = 278 M
N. Lat = 445803
W. Lng = 931823

Protected
60 dBu

Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
220.0	000.0080	0052.1	004.0	126.4	000.0055	0029.8	010.4	37.0
221.0	000.0080	0051.5	004.0	126.2	000.0054	0029.5	010.3	37.0
222.0	000.0080	0051.1	003.9	126.1	000.0054	0029.3	010.3	37.1
223.0	000.0080	0050.5	003.9	125.9	000.0053	0028.9	010.2	37.2
224.0	000.0080	0049.8	003.9	125.7	000.0053	0028.6	010.1	37.2
225.0	000.0080	0049.1	003.9	125.5	000.0052	0028.2	010.1	37.3
226.0	000.0080	0048.1	003.8	125.2	000.0051	0027.7	010.0	37.3
227.0	000.0080	0047.8	003.8	125.0	000.0051	0027.5	010.0	37.4
228.0	000.0080	0048.3	003.8	125.1	000.0051	0027.5	009.9	37.5
229.0	000.0080	0049.0	003.9	125.1	000.0051	0027.6	009.8	37.7
230.0	000.0080	0049.2	003.9	125.1	000.0051	0027.6	009.8	37.8
231.0	000.0080	0049.4	003.9	125.0	000.0051	0027.5	009.7	37.9
232.0	000.0080	0049.7	003.9	125.0	000.0050	0027.4	009.6	38.0
233.0	000.0080	0049.5	003.9	124.8	000.0050	0027.2	009.6	38.1
234.0	000.0080	0049.3	003.9	124.6	000.0049	0027.0	009.5	38.1
235.0	000.0080	0049.2	003.9	124.5	000.0049	0026.9	009.4	38.2
236.0	000.0080	0048.9	003.8	124.3	000.0048	0026.6	009.4	38.2
237.0	000.0080	0048.8	003.8	124.1	000.0048	0026.4	009.3	38.3
238.0	000.0080	0048.7	003.8	123.9	000.0047	0026.2	009.3	38.3
239.0	000.0080	0048.8	003.8	123.7	000.0047	0026.1	009.2	38.4
240.0	000.0080	0048.7	003.8	123.5	000.0046	0026.0	009.1	38.5
241.0	000.0080	0048.4	003.8	123.3	000.0045	0025.8	009.1	38.5
242.0	000.0080	0047.8	003.8	122.9	000.0044	0025.4	009.0	38.5
243.0	000.0080	0047.2	003.8	122.6	000.0043	0024.8	009.0	38.5
244.0	000.0080	0046.5	003.7	122.2	000.0042	0023.9	008.9	38.4
245.0	000.0080	0045.5	003.7	121.7	000.0041	0023.0	008.9	38.3
246.0	000.0080	0044.7	003.7	121.3	000.0040	0022.3	008.9	38.3
247.0	000.0080	0044.1	003.6	120.9	000.0039	0021.7	008.8	38.2
248.0	000.0080	0043.8	003.6	120.6	000.0038	0021.4	008.8	38.2
249.0	000.0080	0044.4	003.6	120.5	000.0037	0021.4	008.7	38.3
250.0	000.0080	0044.2	003.6	120.2	000.0037	0021.2	008.7	38.3
251.0	000.0080	0043.0	003.6	119.6	000.0035	0020.9	008.7	38.1
252.0	000.0080	0042.3	003.5	119.2	000.0034	0020.5	008.7	38.0
253.0	000.0080	0042.0	003.5	118.8	000.0033	0020.3	008.6	38.0
254.0	000.0080	0041.1	003.5	118.3	000.0032	0019.9	008.6	37.8

Section III - LEGAL QUALIFICATIONS

NOTE: Applicants for new stations only:

1. Applicant is (check one of the following):

☐ Individual ☐ General Partnership ☒ Corporation

☐ Other ☐ Limited Partnership ☐ Unincorporated

If the applicant is a legal entity other than an individual, partnership, corporation or unincorporated association, describe in an Exhibit the nature of the applicant. — Exhibit No. N/A

2. (a) Is the applicant for an FM translator station the licensee or permittee of the commercial primary station being rebroadcast or does the applicant or any parties to the application have any interest or connection with the commercial primary station being rebroadcast? See 47 C.F.R. Section 74.1232(d). — ☒ Yes ☐ No

(b) If Yes, will the coverage contour of the translator station extend beyond the protected contour of the commercial primary station being rebroadcast? If YES, this application cannot be granted. See 47 C.F.R. Section 74.1232(d). — ☐ Yes ☒ No

NOTE: Applicants who answer Yes to question (b) (and No to question (a)) are prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232(e).

3. (a) Is the applicant in compliance with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments? — ☒ Yes ☐ No

(b) Will any funds, credit, or other financial assistance for the construction, purchase or operation of the station(s) be provided by aliens, foreign entities, domestic entities controlled by aliens, or their agents? — ☐ Yes ☒ No

If Yes, provide particulars as an Exhibit. — Exhibit No. N/A

4. 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 this application in a civil or criminal proceeding, brought under the provisions of any law related 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 (11) a description of the previously reported matter. — Exhibit No. N/A

5. Has the applicant or any other party to this application had any interest in:

(a) a broadcast application which has been dismissed with prejudice by the ☐ Yes ☒ No

(b) a broadcast application which has been denied by the Commission? ☐ Yes ☒ No

(c) a broadcast station, the license for which has been revoked? ☐ Yes ☒ No

(d) a broadcast application in any Commission proceeding which left unresolved character issues against the applicant? ☐ Yes ☒ No

If the answer to any of the Questions in 5 is Yes, state in an Exhibit the following:

Exhibit No. N/A

(i) Name of party having interest;
(ii) Nature of interests or connection, giving dates;
(iii) Call letters of stations or file number of application or docket number;
(iv) Location.

Section IV - CERTIFICATIONS

NOTE: If this application is for a change in an operating facility, you DO NOT need to respond to Questions 1 and 2.

1. The applicant certifies that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested facilities for three months without revenue. ☒ Yes ☐ No

2. The applicant certifies that: (a) it has a reasonable assurance of a present firm intention for each agreement to furnish capital or purchase capital stock by parties to this application, each loan by banks, financial institutions or others and each purchase of equipment on credit; (b) it can and will meet all contractual requirements as to the collateral, guarantees, and capital investment; and (c) it has determined that a reasonable assurance exists that all identified financial sources (excluding banks, financial institutions and equipment manufacturers) have sufficient net liquid assets to meet these commitments. ☒ Yes ☐ No

3. The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensed permittee of the primary station or any person with an interest or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e). ☐ Yes ☐ No N/A

4. For applicants proposing translator rebroadcasts who are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. If No, this application is unacceptable for filing. ☐ Yes ☐ No N/A

Primary Station proposed to be rebroadcast:

Call Sign	City	State	Channel No.
KSJN (FM)	Minneapolis	MN	258

5. The applicant certifies that it has contacted an authorized spokesperson for the owner of the rights to the proposed transmitter site, and has obtained reasonable assurance that the site will be available for its use if this application is granted. ☒ Yes ☐ No

That person can be contacted at the following address and telephone number:

Name		Mailing Address or Identification	
Steven A Kotke		City of Minneapolis, Dept. of Public Works, 350 South Fifth St.	
City	State	ZIP Code	Telephone No. (include area code)
Minneapolis	MN	55415	612-673-2402

6. For new station and major change applications only, the applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580. ☒ Yes ☐ No

7. 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

THE ORIGINAL OF THIS APPLICATION FORM MUST BE SIGNED AND DATED BY THE APPLICANT. THE REQUIRED COPIES CAN BE CONFORMED. SEE 47 C.F.R. SECTION 73.3513

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

The APPLICANT acknowledges that all statements made in this appfication and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND 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).

8. 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 of Applicant	Signature
Minnesota Public Radio	/Thomas J Kieft
Title Executive Vice President	Date March 15, 2000