FEDERAL COMMUNICATIONS COMMISSION

CLASS OF STATION FM

RITA1

The following application is submitted for action by the Chief, Broadcast Bureau.

ST	FILE NUMBER	CALL	APPLICANT AND LOCATION	NATURE OF APPLICATION
IA	BPH -911004MG N/M	NEW 102.1MHZ	SHARON A. MAYER MILFORD IA	CP FOR NEW FM ON FREQ: 102.1 MHZ; ERP: 50 KW (H&V); HAAT: 135 METERS (H&V); 43 20 37 95 07 50

LICENSE EXPIRATION DATE _____

PN: 10/26-91

Sherita V. White

CHIEF, LICENSE DIVISION

RECOMMENDATION: GRANT( ) CONSTRUCTION DATES, START _____ END _____

CONTESTED ( ) UNCONTESTED ( )

APPROVED _____

_____

FOR CHIEF, BROADCAST BUREAU

F.C.C.-WASHINGTON, D.C.

Form A-378
January 1980

Approved by OMB
3060-0440
Expires 2/28/93

FEDERAL COMMUNICATIONS COMMISSION

FEE PROCESSING FORM

FOR FCC USE ONLY	FCC/MELLON OCT 04 1991 10-07-91 8195884 002

Please read instructions on back of this form before completing it. Section I MUST be completed. If you are applying for concurrent actions which require you to list more than one Fee Type Code, you must also complete Section II. This form

INSTRUCTIONS FOR COMPLETING FEE PROCESSING FORM, FCC FORM 155, March 1991

(1) **"Applicant Name"** - Enter the name (last, first, middle initial) of the applicant as it appears on the original application or filing being submitted with this Fee Processing Form. If company, enter name which is used commercially.

(2) **"Mailing Address (Line 1)"** - Enter the street address or post office box number to which the applicant wishes correspondence sent.

(3) **"Mailing Address (Line 2)"** - This line may be used for further identification of the address if additional space is required.

(4) **"City"** - Enter the name of the city associated with the given street address.

(5) **"State or Country"** - Enter the appropriate two-digit state abbreviation as prescribed by the U.S. Postal Service. If address is foreign, enter

LAW OFFICES

TIERNEY & SWIFT

SUITE 210

1200 EIGHTEENTH STREET, N. W.

WASHINGTON, D. C. 20036

JOHN L. TIERNEY
RICHARD F. SWIFT

TELEPHONE
(202) 293-7979

BY COURIER

October 4, 1991

Federal Communications Commission
Mass Media Services
P.O. Box 358195
Pittsburgh, Pennsylvania 15251-5195

Re: Sharon A. Mayer
Application for Construction Permit
for New FM Broadcast Station
Channel 271C2
Milford, Iowa

Dear Sir/Madam:

Transmitted herewith in triplicate, on behalf of Sharon A. Mayer, is an application on FCC Form 301 for a new FM broadcast station on Channel 271C2 at Milford, Iowa.

Form 155 and a check in the amount of $2,030.00 is submitted with the application in payment of the filing fee.

An extra copy of the application is also submitted with the request that it be stamped as received.

Should any questions arise concerning this application, please communicate with this office.

Very truly yours,

Richard F. Swift

Richard F. Swift

RFS/tdj

Enclosure

Federal Communications Commission
Washington, D. C. 20554

FCC 301

ORIGINAL

Approved by OMB
3060-0027
Expires 2/28/92
See Page 25 for information regarding public burden estimate

APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

For COMMISSION Fee Use Only		For APPLICANT Fee Use Only
	FEE NO:	Is a fee submitted with this application? [x] Yes [ ] No
	FEE TYPE:	If fee exempt (see 47 C.F.R. Section 1.1112), indicate reason therefor (check one box):
	FEE AMT:	[ ] Noncommercial educational licensee [ ] Governmental entity
	ID SEQ:	FOR COMMISSION USE ONLY FILE NO. BPH-911004MG

31 | 10-28-91

Section I - GENERAL INFORMATION

1. Name of Applicant			Send notices and communications to the following person at the address below:		
Sharon A. Mayer			Name Sharon A. Mayer		
Street Address or P.O. Box R.R. 1, Box 169			Street Address or P.O. Box R.R. 1, Box 169		
City Milford	State IA	ZIP Code 51351	City Milford	State IA	ZIP Code 51351
Telephone No. (Include Area Code) 712-338-2228			Telephone No. (Include Area Code) 712-338-2228		

2. This application is for: [ ] AM [X] FM [ ] TV

(a) Channel No. or Frequency	(b) Principal Community	City	State
271C2 102.1		Milford	IA

(c) Check one of the following boxes:

[X] Application for **NEW** station

[ ] **MAJOR** change in licensed facilities; call sign: _____

[ ] **MINOR** change in licensed facilities; call sign: _____

[ ] **MAJOR** modification of construction permit; call sign: _____

File No. of construction permit: _____

[ ] **MINOR** modification of construction permit; call sign: _____

File No. of construction permit: _____

[ ] **AMENDMENT** to pending application; Application file number: _____

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. Is this application mutually exclusive with a renewal application? [ ] Yes [XX] No

If Yes, state

102.1MHZ
BPH -911004MG NEW
MILFORD IA
SHARON A. MAYER

of License	
	State

Section II - LEGAL QUALIFICATIONS

Name of Applicant

Sharon A. Mayer

1. Applicant is: *(check one box below)*

[X] Individual [ ] General partnership [ ] For-profit corporation

[ ] Other [ ] Limited partnership [ ] Not-for-profit corporation

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

NOTE: The terms "applicant," "parties to this application," and "non-party equity owners in the applicant" are defined in the instructions for Section II of this form. Complete information as to each "party to this application" and each "non-party equity owner in the applicant" is required. If the applicant considers that to furnish complete information would pose an unreasonable burden, it may request that the Commission waive the strict terms of this requirement with appropriate justification.

3. If the applicant is not an individual, provide the date and place of filing of the applicant's enabling charter (e.g., a limited partnership must identify its certificate of limited partnership and a corporation must identify its articles of incorporation by date and place of filing):

Date N/A Place N/A

In the event there is no requirement that the enabling charter be filed with the state, the applicant shall include the enabling charter in the applicant's public inspection file. If, in the case of a partnership, the enabling charter does not include the partnership agreement itself, the applicant shall include a copy of the agreement in the applicant's public inspection file.

4. Are there any documents, instruments, contracts or understandings (written or oral), other than instruments identified in response to Question 3 above, relating to future ownership interests in the applicant, including but not limited to, insulated limited partnership shares, nonvoting stock interests, beneficial stock ownership interests, options, rights of first refusal, or debentures? [ ] Yes [X] No

If Yes, submit as an Exhibit all such written documents, instruments, contracts, or understandings, and provide the particulars of any oral agreement. Exhibit No. N/A

5. Complete, if applicable, the following certifications:

(a) Applicant certifies that no limited partner will be involved in any material respect in the management or operation of the proposed station. [ ] Yes [ ] No N/A Sole Proprietor

If No, applicant must complete Question 6 below with respect to all limited partners actively involved in the media activities of the partnership.

(b) Does any investment company *(as defined in 15 U.S.C. Section 80 a-3)*, insurance company, or trust department of any bank have an aggregated holding of greater than 5% but less than 10% of the outstanding votes of the applicant? [ ] Yes [X] No Sole Proprietor

If Yes, applicant certifies that the entity holding such interest exercises no influence or control over the applicant, directly or indirectly, and has no representatives among the officers and directors of the applicant. [ ] Yes [ ] No N/A

Section II - LEGAL QUALIFICATIONS (Page 2)

6. List the applicant, parties to the application and non-party equity owners in the applicant. Use one column for each individual or entity. Attach additional pages if necessary.

(Read carefully - The enclosed items below refer to line numbers in the following table.)

7. Does the applicant, any party to the application or any non-party equity owner in the applicant have, or have they had, any interest in:

(a) a broadcast station, or pending broadcast station application before the Commission? ☐ Yes ☒ No

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

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

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

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

If the answer to any of the questions in (a)-(e) above is Yes state in an Exhibit the following Exhibit No.

CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS

11. (a) Is the applicant in violation of the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments? *(See Instruction C to Section II.)* ☐ Yes ☒ No

(b) Will any funds, credits 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 the answer to (b) above is Yes, attach an Exhibit giving full disclosure concerning this assistance. Exhibit No. N/A

12. (a) Has an adverse finding been made or an adverse final action been taken by any court or administrative body as to the applicant, any party to this application, or any non-party equity owner in the applicant in a civil or criminal proceeding brought under the provisions of any law related to the following:

Any felony; broadcast related antitrust or unfair competition; criminal fraud or fraud before another governmental unit; or discrimination? ☐ Yes ☒ No

(b) Is there now pending in any court or administrative body any proceeding involving any of the matters referred to in (a) above? ☐ Yes ☒ No

If the answer to (a) and/or (b) above is Yes, attach an Exhibit giving full disclosure concerning persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), a statement of the facts upon which the proceeding is or was based or the nature of the offense alleged or committed, and a description of the current status or disposition of the matter. Exhibit No. N/A

SECTION III - FINANCIAL QUALIFICATIONS

Section IV-A - PROGRAM SERVICE STATEMENT

Attach as an Exhibit, a brief description, in narrative form, of the planned programming service relating to the issues of public concern facing the proposed service area.

Exhibit No. 2

Section IV-B - INTEGRATION STATEMENT

Attach as an Exhibit the information required in 1. and 2. below.

Exhibit No. 3

1. List each principal of the applicant who, in the event of a grant of the application on a comparative basis proposes to participate in the management of the proposed facility and, with respect to each such principal, state whether he or she will work full-time (minimum 40 hours per week) or part-time (minimum 20 hours per week) and briefly describe the proposed position and duties.

2. State with respect to each principal identified in response to Item 1. above, whether the applicant will claim qualitative credit for any of the following enhancement factors:

   (a) Minority Status
   (b) Past Local Residence
   If Yes, specify whether in the community of license or service area and the corresponding dates.
   (c) Female Status
   (d) Broadcast Experience
   If Yes, list each employer and position and corresponding dates.
   (e) Daytime Preference

ORIGINAL

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

Sharon A. Mayer

Call letters *(if issued)*

Is this application being filed in response to a window? [X] Yes [ ] No

If Yes, specify closing date: October 7, 1991

Purpose of Application: *(check appropriate box(es))*

- [X] Construct a new (main) facility
- [ ] Construct a new auxiliary facility
- [ ] Modify existing construction permit for main facility
- [ ] Modify existing construction permit for auxiliary facility
- [ ] Modify licensed main facility
- [ ] Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- [ ] Antenna supporting-structure height
- [ ] Effective radiated power
- [ ] Antenna height above average terrain
- [ ] Frequency
- [ ] Antenna location
- [ ] Class
- [ ] Main Studio location
- [ ] Other *(Summarize briefly)*

File Number(s) _____

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
271	Milford	Dickinson	IA

Class *(check only one box below)*

[ ] A [ ] B1 [ ] B [ ] C3

[X] C2 [ ] C1 [ ] C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark. Approximately 1.6 km east of U.S. Route 71, 2.3 km NE of Milford in Dickinson Co., IA.

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	°	'	"	Longitude	°	'	"
	43	20	37		95	07	50

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? [ ] Yes [X] No

If Yes, give call letter(s) or file number(s) or both. N/A

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

N/A

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates.

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ☒ Yes ☐ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No. N/A

Date September 24, 1991 Office where filed Central Regional Office

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Fuller	2.6	243.5
(b)	Spirit Lake Municipal	4.9	352.1

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 437 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 152 meters

(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)] 589 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 143 meters (H)

143 meters (V)

(2) above mean sea level [(a)(1) + (b)(1)] 580 meters (H)

580 meters (V)

(3) above average terrain 135 meters (H)

135 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above except item 7(b)(3). If mounted on an AM directional-array element

Exhibit No. Tech

10. Is a directional antenna proposed? ☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field. Exhibit No. N/A

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)? ☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service. Exhibit No. N/A

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal? ☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No. N/A

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207? ☒ Yes ☐ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply? N/A ☐ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers. Exhibit No. N/A

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No. N/A

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following: Exhibit No. N/A

(1) Protected and interfering contours, in all directions (360), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers and indication of whether facility is operating

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No. Tech.

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. Tech.

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 7,905 sq. km. Population 83,924

18. For an application involving an auxiliary facility only, 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. N/A

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. 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)*

[X] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: NGDC)

[ ] Other *(briefly summarize)*

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 5)

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
*			
0	145.2	32.1	51.6
45	117.8	29.2	47.7
90	129.8	30.4	49.4
135	131.9	30.7	49.7
180	144.2	32.0	51.4
225	149.7	32.6	52.2
270	126.0	30.1	48.8
315	137.5	31.2	50.5

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No. N/A

If No, explain briefly why not. Categorically excluded per 47 CFR 1.1306. See Technical Narrative.

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
James D. Sadler	Technical Consultant
Signature	Address *(Include ZIP Code)* du Treil, Lundin & Rackley, Inc. 1019 19th Street, N.W., 3rd Floor Washington, D.C. 20036
Date September 24, 1991	Telephone No. *(Include Area Code)* (202) 223-6700

TECHNICAL EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
SHARON A. MAYER
MILFORD, IOWA

September 24, 1991

CH 271C2 50 KW 135 M

TECHNICAL EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
SHARON A. MAYER
MILFORD, IOWA
CH 271C2 50 KW 135 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of Sharon A. Mayer in support of an application for a new FM broadcast station to serve Milford, Iowa. The proposed station will operate on channel 271C2 with effective radiated power of 50 kilowatts and antenna height above average terrain of 135 meters. Channel 271C2 was assigned to Milford as a result of MM Docket No. 91-48. The filing window for the allocation closes on October 7, 1991.

The proposal would not be subject to environmental processing in accordance with 47 CFR 1.1306. The Central Regional Office of the Federal Aviation Administration has been notified of the proposed construction. It is believed that the instant application conforms with all applicable rules and regulations of the Federal Communications Commission. Specifications for the proposed operation are included herein as Figure 1.

Proposed Transmitter Location

The proposed 6-bay FM antenna will be side-mounted on a uniform cross-section, guyed tower to be constructed 1.6 kilometers east of U.S. Route 71, 2.3

kilometers northeast of Milford in Dickinson County, Iowa. The tower location is uniquely described by the following geographic coordinates, which were scaled from the "Milford, Iowa" U.S.G.S. 7.5 minute quadrangle map:

43° 20' 37" North Latitude

95° 07' 50" West Longitude.

A map showing the proposed transmitter location is included herein as Figure 2. A sketch showing the proposed antenna and supporting structure is included herein as Figure 3.

Allocation Study

As shown on Figure 6, the proposed transmitter site meets the Commission's separation requirements of 47 CFR 73.207 with respect to all known stations and allocations.

Coverage Contours

The predicted coverage contours were calculated in accordance with the provisions of 47 CFR 73.313. In accordance with current FCC practice, no consideration was given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers (2 to 10 miles) were determined from the NGDC 30-second computer database. The standard eight radials evenly spaced at 45-degree intervals were used for determining the average elevations and the distances to coverage contours. The antenna radiation center heights

above average terrain in the individual radial directions and the effective radiated power were used in conjunction with the F(50,50) curves of 47 CFR 73.333 (Figure 1) to determine distances to the 70 dBu (3.16 mV/m) and 60 dBu (1 mV/m) contours. Figure 4 is a tabulation of average elevations and distances to the predicted coverage contours. Figure 5 is a map showing the predicted coverage contours.

As the map in Figure 5 shows, the 70 dBu contour will cover all of Milford. The Milford city limits shown were obtained from a map contained in the 1980 census. The proposed facilities, therefore, comply with 47 CFR 73.315.

The "blanketing" contour of a 50-kilowatt FM station extends 2.8 kilometers. The applicant recognizes its responsibility to remedy complaints of blanketing interference as required by 47 CFR 73.318. FM station KUOO, Spirit Lake, Iowa, is the only FM or TV broadcast station located within 10 kilometers of the proposed transmitter site; therefore, the proposal is not expected to create objectionable interference. However, the

computer algorithm using a root mean square method. The 60 dBu contour encompasses 7,905 square kilometers in which 83,924 persons reside.

Environmental Considerations

The proposed facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." Using the total of horizontally polarized and vertically polarized power, 100 kilowatts, and a six element FM transmitting antenna, the "worst-case" minimum height needed to meet the FCC specified guidelines, as determined from Appendix B, Table 1 of the Bulletin is 57.8 meters. As the lowest element of the antenna will be approximately 135 meters above ground level, the radiofrequency field exposure in the vicinity of the tower base will be well within the FCC guidelines.

The transmitter site will be fenced and posted with appropriate warning signs and in the event it is necessary for workers to ascend the tower for routine maintenance or inspection purposes, the transmitter power will be reduced or terminated as necessary to comply with the Commission's occupational exposure guidelines.

The proposal is categorically excluded from environmental processing, as it meets all of the criteria for such an exclusion in 47 CFR 1.1306. The proposal is not believed to involve construction at a site location specified under 47 CFR 1.1307(a)(1)-(7), nor employ high

intensity lighting in an area identified in 47 CFR 1.1307(a)(8), and the human exposure to radiofrequency radiation is predicted to be within the standards specified in 47 CFR 1.1307(b).

James D. Sadler

September 24, 1991

TECHNICAL EXHIBIT
APPLICATION FOR FM CONSTRUCTION PERMIT
SHARON A. MAYER
MILFORD, IOWA
CH 271C2 50 KW 135 M

Technical Specifications

Channel	271C2
Frequency	102.1 MHz
Site coordinates	43° 20' 37" North Latitude
	95° 07' 50" West Longitude
Site elevation above mean sea level	436.8 m (1433 ft)
Average elevation above mean sea level of standard eight radials, 3-16 kilometers	444.4 m (1458 ft)
Overall height of proposed antenna structure with obstruction lighting	
Above ground	152.1 m (499 ft)
Above mean sea level	588.9 m (1932 ft)
Height of FM antenna radiation center	
Above ground	142.9 m (469 ft)
Above mean sea level	579.7 m (1902 ft)
Above average terrain	135.3 m (444 ft) (rounds to 135)
Transmitter	Make and Model to be determined
Maximum rated power output	25 kW

Transmission line	*Cablewave Systems, type HCC300-50J
Nominal diameter	7.62 cm (3.00 in)
Length	144.8 m (475 ft)
Efficiency (0.67 dB loss)	85.8%
Antenna	*Shively Labs, model 6810-6
Number of bays	6
Input power rating	40 kW
Polarization	Circular
Maximum power gain	
Horizontal polarization	3.28
Vertical polarization	3.28

Proposed Operation

Transmitter output power	17.8 kW
Transmission line loss	2.6 kW
Antenna input power	15.2 kW
Effective radiated power	
Circular polarization	50.0 kW

*Or equivalent