

PF/KRSU/Levin

United States of America

FEDERAL COMMUNICATIONS COMMISSION

FM BROADCAST STATION LICENSE



Official Mailing Address:

MINNESOTA PUBLIC RADIO, INC.
45 EAST SEVENTH ST.
ST. PAUL, MN 55101

Authorizing Official:

Arthur E. Doak
Arthur E. Doak
Supervisory Engineer, FM Branch
Audio Services Division
Mass Media Bureau

Grant Date: **AUG 16 1990**

Call sign: KRSU

This license expires 3:00 am.
local time: April 01, 1997

License File No.: BLED-891031KB

This license covers Permit No.: BPED-840604IA
as modified by Permit No.: BMPED-890602IF

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve the public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

Name of Licensee:

MINNESOTA PUBLIC RADIO, INC.

Station Location:

MN-APPLETON

RECEIVED

AUG 23 1990

MINNESOTA PUBLIC RADIO

Frequency (MHz): 91.3

Channel: 217

Class: C

Hours of Operation: Unlimited

Main Studio Address:

MN-3.2 KM SSE OF APPLETON.

Transmitter location (address or description):

MN-3.2 KM SSE OF APPLETON.

Remote control point address:

MN-NONE

Transmitter: Type accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Transmitter output power (kW): 18.5

Antenna type: (directional or non-directional): Non-directional

Desc: HARRIS FMH10AC, TEN SECTIONS, CIRCULARLY POLARIZED, LEG-MOUNTED ON A UNIFORM CROSS-SECTION GUYED TOWER.

Antenna coordinates: North Latitude: 45 10 3.0
West Longitude: 96 00 2.0

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the horizontal plane (kW) :	75.0	75.0
Height of radiation center above ground (meters) :	337.0	337.0
Height of radiation center above mean sea level (meters) :	648.0	648.0

Height of radiation center above
average terrain (meters) : 341.0 341.0

Overall height of antenna structure above ground (including obstruction
lighting, if any) : 392.0 meters

Obstruction marking and lighting specifications for antenna
structure:

It is to be expressly understood that the issuance of these specifications
is in no way to be considered as precluding additional or modified marking
or lighting as may hereafter be required under the provisions of Section
303(q) of the Communications Act of 1934, as amended.

Paragraph 3.0, FCC Form 715 (March 1978):

There shall be installed at the top of the structure one 300 m/m
electric code beacon equipped with two 620- or 700-watt lamps (PS-40,
Code Beacon type), both lamps to burn simultaneously, and equipped
with aviation red color filters. Where a rod or other construction of
not more than 20 feet in height and incapable of supporting this
beacon is mounted on top of the structure and it is determined that
this additional construction does not permit unobstructed visibility
of the code beacon from aircraft at any normal angle of approach,
there shall be installed two such beacons positioned so as to insure
unobstructed visibility of at least one of the beacons from aircraft
at any normal angle of approach. The beacons shall be equipped with a
flashing mechanism producing not more than 40 flashes per minute nor
less than 12 flashes per minute with a period of darkness equal to
approximately one-half of the luminous period.

Paragraph 8.0, FCC Form 715 (March 1978):

On levels at approximately three-fourths, one-half and one-fourth of
the over-all height of the tower one similar flashing 300 m/m electric
code beacon shall be installed in such position within the tower
proper that the structural members will not impair the visibility of
the beacon from aircraft at any normal angle of approach. In the event
these beacons cannot be installed in a manner to insure unobstructed
visibility of the beacon from aircraft at any normal angle of
approach, there shall be installed two such beacons at each level.
Each beacon shall be mounted on the outside of diagonally opposite
corners or opposite sides of the tower at the prescribed height.

Paragraph 17.0, FCC Form 715 (March 1978):

On levels at approximately seven-eighths, five-eighths, three-eighths and one-eighth of the over-all height of the tower, at least one 116- or 125-watt lamp (A21/TS) enclosed in an aviation red obstruction light globe shall be installed on each outside corner of the structure.

Paragraph 21.0, FCC Form 715 (March 1978):

All lighting shall burn continuously or shall be controlled by a light sensitive device adjusted so that the lights will be turned on at a north sky light intensity level of about 35 foot candles and turned off at a north sky light intensity level of about 58 foot candles.

Paragraph A, FCC Form 715-A (Nov. 1983):

There shall be installed at the top of the antenna structure a white capacitor discharge omnidirectional light which conforms to FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems. This light shall be mounted on the highest point of the structure. If the antenna or other appurtenance at its highest point is incapable of supporting the omnidirectional light, one or more such lights shall be installed on a suitable adjacent support with the lights mounted not more than 20 feet below the tip of the appurtenance. The lights shall be positioned so as to permit unobstructed viewing of at least one light from aircraft at any normal angle of approach. The light unit(s) shall emit a beam with a peak intensity around its periphery of approximately 20,000 candelas during daytime and twilight, and approximately 4,000 candelas at night.

Paragraph B, FCC Form 715-A (Nov. 1983):

There shall be installed at the top of the skeletal or other main support structure three or more high intensity light units which conform to FAA/DOD Specification L-856 High Intensity Obstruction Lighting Systems. The complement of units shall emit a white high intensity light and produce an effective intensity of not less than 200,000 candelas (daytime) uniformly about the antenna structure in the horizontal plane. The effective intensity shall be reduced to approximately 20,000 candelas at twilight, and to approximately 4,000 candelas at night. The light units shall be mounted in a manner to ensure unobstructed viewing from aircraft at any normal angle of approach, so that the effective intensity of the full beam is not impaired by any structural member of the skeletal framework. The units will normally be adjusted so that the center of the beam is in the horizontal plane.

Paragraph E, FCC Form 715-A (Nov. 1983):

At the approximate one-fourth, one-half and three-fourths levels of the skeletal tower there shall be installed three or more high intensity light units which conform to FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems. The complement of units shall emit a white high intensity light and produce an effective intensity of not less than 200,00 candelas (daytime) uniformly about the antenna structure in the horizontal plane. The effective intensity shall be reduced to approximately 20,000 candelas at twilight, and to approximately 4,000 candelas at night. The light units shall be mounted in a manner to ensure unobstructed viewing from aircraft at any normal angle of approach, so that the effective intensity of the full beam is not impaired by any structural member of the skeletal framework. The normal angular adjustment of the beam centers above the horizontal shall be three degrees at the one-fourth level, two degrees at the one-half level and one degree at the three-fourths level.

Paragraph H, FCC Form 715-A (Nov. 1983):

All lights shall be synchronized to flash simultaneously at 40 pulses per minute. The light system shall be equipped with a light sensitive control device which shall face the north sky and cause the intensity steps to change automatically when the north sky illumination on a vertical surface is as follows:

1. Day to Twilight: Shall not occur before the illumination drops to 60 footcandles, but shall occur before it drops to 30 footcandles.
2. Twilight to Night: Shall not occur before the illumination drops to 5 footcandles, but shall occur before it drops to 2 footcandles.
3. Night to Day: The intensity changes listed in 1. and 2. above shall be reversed in transitioning from the night to day modes.

Paragraph J, FCC Form 715-A (Nov. 1983):

Antenna structures shall be equipped with:

1. High intensity lighting for daytime use and red lighting for nighttime use as specified in FCC Form 715; or
2. High intensity lighting, 24 hours a day, which conforms to FAA/DOD Specification L-856, High Intensity Obstruction Lighting Systems.

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THE TOWER STRUCTURE AUTHORIZED IN THIS CONSTRUCTION PERMIT
SHALL BE PAINTED AND LIGHTED AS FOLLOWS:

PARAGRAPHS A, B, E, H, J OF FCC FORM 715A (24 HOURS)

Call sign: KRSU

License No.: BLED-891031KB

OR

PARAGRAPHS 3, 8, 17, 21, OF FCC FORM 715 (NIGHT)
AND PARAGRAPHS A, B, E, H, J OF FCC FORM 715A (DAY)
