



United States of America
FEDERAL COMMUNICATIONS COMMISSION
FM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

UNIVERSITY OF NORTHWESTERN - ST. PAUL
3003 SNELLING AVE N.
ST. PAUL MN 55133

Dale E. Bickel
Senior Engineer
Audio Division
Media Bureau

Facility Id: 49348

Call Sign: WJRF

License File Number: BLED-19890726KB

Grant Date: August 07, 1990

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

This license covers Permit No.: BPED-19870330IA

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.

Callsign: WJRF

License No.: BLED-19890726KB

Name of Licensee: UNIVERSITY OF NORTHWESTERN - ST. PAUL

Station Location: MN-DULUTH

Frequency (MHz): 89.1

Channel: 206

Class: A

Hours of Operation: Unlimited

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

Transmitter output power:

Antenna type: Not Reported

Description:

Antenna Coordinates: North Latitude: 46 deg 47 min 14 sec
West Longitude: 92 deg 06 min 53 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	.49	.49
Height of radiation center above ground (Meters):	83	83
Height of radiation center above mean sea level (Meters):	450	450
Height of radiation center above average terrain (Meters):	131	131

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 92 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.

None Required

*** END OF AUTHORIZATION ***