



United States of America
FEDERAL COMMUNICATIONS COMMISSION
FM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

WEST CENTRAL MICHIGAN MEDIA MINISTRIES
P.O. BOX 567
CADILLAC MI 49601

Daniel J Fontaine
Supervisory Engineer
Audio Division
Media Bureau

Facility ID: 24772

Grant Date: August 30, 1994

Call Sign: WNHG

This permit expires 3:00 a.m.
local time, February 28, 1996.

Permit File Number: BPED-19931025MC

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of Permittee: WEST CENTRAL MICHIGAN MEDIA MINISTRIES

Station Location: MI-GRAND RAPIDS

Frequency (MHz): 89.9

Channel: 210

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: As required to achieve authorized ERP.

Antenna type: Directional

Antenna Coordinates: North Latitude: 42 deg 50 min 32 sec
West Longitude: 85 deg 37 min 05 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	4.0	4.0
Height of radiation center above ground (Meters):	48	48
Height of radiation center above mean sea level (Meters):	284	284
Height of radiation center above average terrain (Meters):	59	59

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 49 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

Special operating conditions or restrictions:

- 1 During the installation of the antenna authorized herein, AM Station (s) listed below shall determine operating power by the indirect method and, if necessary, request temporary authority from the Commission in Washington to operate with parameters at variance in order to maintain monitoring point values within authorized limits. Upon completion of the installation, common point impedance measurements on the AM array shall be made and a partial proof of performance, as defined by Section 73.154(a) of the Commission's Rules, shall be conducted to establish that the AM array has not been adversely affected and, prior to or simultaneous with the filing of the application for license to cover this permit, the results submitted to the Commission (along with a tower sketch of the installation) in an application for the AM station to return to the direct method of power determination.
(Revised January 28, 1983)
WGVU(AM)

Special operating conditions or restrictions:

- 2 Prior to construction of the tower authorized herein, permittee shall notify AM Station(s) listed below so that, if necessary, the AM station(s) may determine operating power by the indirect method and request temporary authority from the Commission in Washington, D.C. to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. Permittee shall be responsible for the installation and continued maintenance of detuning apparatus necessary to prevent adverse effects upon the radiation pattern of the AM station(s). Both prior to construction of the tower and subsequent to the installation of all appurtenances thereon, a partial proof of performance, as defined by Section 73.154(a) of the Commission's Rules, shall be conducted to establish that the AM array has not been adversely affected and, prior to or simultaneous with the filing of the application for license to cover this permit, the results submitted to the Commission.
(Revised March 14, 1983)
WOOD (AM)
- 3 The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
- 4 BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee shall submit the results of a complete proof-of-performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components. This proof-of-performance may be accomplished using the complete full size antenna, or individual bays therefrom, mounted on a supporting structure of identical dimensions and configuration as the proposed structure, including all braces, ladders, conduits, coaxial lines, and other appurtenances; or using a carefully manufactured scale model of the entire antenna, or individual bays therefrom, mounted on an equally scaled model of the proposed supporting structure, including all appurtenances. Engineering exhibits should include a description of the antenna testing facilities and equipment employed, including appropriate photographs or sketches and a description of the testing procedures, including scale factor, measurements frequency, and equipment calibration.
- 5 BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee shall submit an affidavit from a licensed surveyor to establish that the directional antenna has been oriented at the proper azimuth.
- 6 BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee/licensee shall submit an affidavit that the installation of the directional antenna system was overseen by a qualified engineer. This affidavit shall include a certification by the engineer that the antenna was installed pursuant to the manufacturer's instructions and list the qualifications of the certifying engineer.

Special operating conditions or restrictions:

- 7 The relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value indicated on the composite radiation pattern authorized by this construction permit.

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A relative field strength of 1.0 on the composite radiation pattern herein authorized corresponds to the following effective radiated power:

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4.0 kilowatts

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Principal minima and their associated field strength limits:

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220-260 degrees True: 0.127 kilowatts

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BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee/licensee must submit documentation, along with FCC Form 302-FM, which demonstrates compliance with the following special operating condition:

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Permittee shall submit a statement certifying that a fence has been constructed at least 5 meters from the base of the tower and in such a manner as to prevent the exposure of humans to radiofrequency radiation in excess of the American National Standards Institute Guidelines in OST Bulletin No. 65, October 1985. The fence must be of a type which will preclude casual or inadvertent access, and must include warning signs at appropriate intervals which describe the nature of the hazard.

*** END OF AUTHORIZATION ***