FAA & FCC Documentation

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76137

Aeronautical Study No.
2012-AGL-10311-OE
Prior Study No.
2011-AGL-3900-OE

Issued Date: 12/14/2012

Dave Magnum
Magnum Communications, Inc.
N6837 Bobbi Road
Pardeeville, WI 53954

**** LIGHTING DEVIATION RECOMMENDATION****

The Federal Aviation Administration has completed an evaluation of your request concerning:

Structure:	Antenna Tower Brooklyn Tower
Location:	Brooklyn, WI
Latitude:	42-51-15.46N NAD 83
Longitude:	89-17-41.31W
Heights:	962 feet site elevation (SE)
	489 feet above ground level (AGL)
	1451 feet above mean sea level (AMSL)

Based on this evaluation, we have no objection to the request to deviate from the standards outlined in the FAA Advisory Circular 70/7460-1 K Change 2 Obstruction Marking and Lighting, Chapter 5.

The FAA finds that for those towers 151-350 feet AGL that normally require only one top mounted Flashing Red Obstruction (L-864) light and one level of Steady-burning Red Obstruction (L-810) lights, it is necessary to either configure the existing L-810s to flash at the same rate as the L-864 or replace the L-810 with a L-864 configured to flash simultaneously. Flash rates must be 30 flashes per minute (± 3 flashes).

The FAA finds that for structures 351 feet AGL and above, the absence of steady burning Red Obstruction (L-810) lights on this structure will not impair aviation safety. However, aeronautical study revealed that the structure should continue to be lighted with the appropriate Flashing Red Obstruction (L-864) lights. Flash rates must be 30 flashes per minute (± 3 flashes).

If this structure is subject to the authority of the Federal Communications Commission a copy of this letter will be forwarded to them and application should be made for permission to change the marking/lighting as requested.

This evaluation concerns the effect of the marking/lighting changes on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (202) 267-8783. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-AGL-10311-OE.

Signature Control No: 175773204-178898616 (DEV)
Sheri Edgett-Baron
Manager, Obstruction Evaluation Group

cc: FCC

USEFUL SITES FOR INFORMATION ON TOWER LIGHTING REQUIREMENTS

PROPOSED CONSTRUCTION OR ALTERATION OF A TOWER SITE
http://forms.faa.gov/forms/faa7460-1.pdf

DATABASE OF FAA ADVISORY CIRCULARS
- AC70/7460-1K-Obstruction Marking & Lighting
- AC 150/5345-53C Lighting Equipment Certification Program
  http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/MainFrame?OpenFrameSet

RECENT ENFORCEMENT ACTIONS
http://www.fcc.gov/eb/broadcast/asml.html

FCC REGULATIONS FOR MONITORING
- 17.47 (24 hour tower lighting confirmation & 90 day inspection requirement)
- 17.48 (30 minute alarm notification)
- 17.49 (Tower lighting maintenance record requirements)
- 17.51 (Time when lights should be exhibited)
  http://www.access.gpo.gov/nara/cfr/waisidx_04/47cfr17_04.html

FAA NOTICE CRITERIA TOOL
https://oeaaa.faa.gov/oeaaa/external/portal.jsp

FLASH TECHNOLOGY SERVICES
- Flash University – Component Level Training
- Monitoring and Call Center Solutions
- 24/7/365 National Operations Center
- Nationwide Certified Service Provider Program

brochure/outside - flap

Flash Technology

332 NICHOL MILL LANE
FRANKLIN, TENNESSEE 37067
PHONE: 615.503.2000 / 888-313-5274
FAX: 615.261.2600
email: flash.info@spx.com
www.flashtechnology.com

brochure/outside - back panel

Flash Technology

TOWER LIGHTING GUIDELINES

ASSET-FREE BY THE FEDERAL AVIATION ADMINISTRATION

Around The World
Around The Clock
Always On

brochure/outside - front panel

PAINT AND RED LIGHTING

Towers marked with paint for day and red lights for night.
AC 70/7460-1K

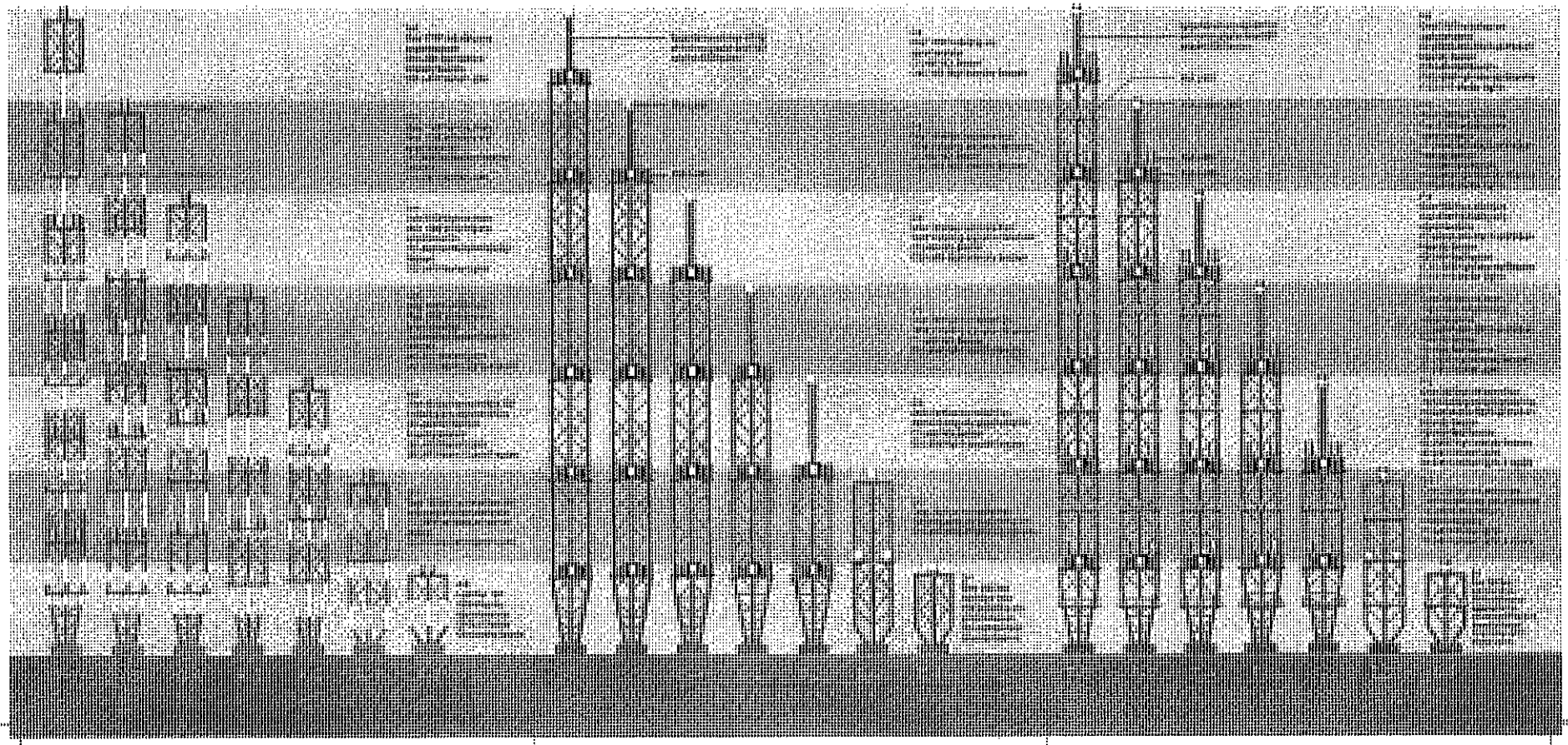
WHITE LIGHTING

Towers marked with white lights for day and white lights for night.
AC 70/7460-1K

DUAL LIGHTING

Towers marked with white lights for day and red lights for night.
AC 70/7460-1K

›Flash Technology



Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Section 73.202(b),	)	MB Docket No. 04-239
Table of Allotments,	)	RM-10998
FM Broadcast Stations.	)	
(Portage and Stoughton, Wisconsin)	)	

REPORT AND ORDER
(Proceeding Terminated)

Adopted: April 5, 2006 **Released: April 7, 2006**

By the Assistant Chief, Audio Division, Media Bureau:

1. The Audio Division has before it a *Notice of Proposed Rule Making*[1] issued at the request of Magnum Communications, Inc., licensee of Station WBKY(FM), Portage, Wisconsin ("Petitioner"). Petitioner proposes the reallotment of Channel 240A from Portage, Wisconsin to Stoughton, Wisconsin, as the community's first local transmission service, and the modification of the license for Station WBKY(FM) to reflect the changes. Petitioner pledges to file an application for the channel and to construct the facilities if the application is granted. Opposing comments were filed by Mid-West Management, Inc. ("Mid-West").[2] Petitioner filed comments[3] and reply comments.

Background

2. Petitioner filed this proposal for reallotment in accordance with the provisions of Section 1.420(i) of the Commission's Rules, which permits the modification of a station's license to specify a new community of license while not affording other interested parties the opportunity to file competing expressions of interest in the proposed allotment.[4] In considering a reallotment proposal, we compare the existing allotment to the proposed allotment to determine whether the reallotment will result in a preferential arrangement of allotments. This determination is based upon the FM Allotment priorities.[5]

3. In opposition, Mid-West argues that the proposal will not serve the public interest because it will result in a large gray area of 2,400 persons receiving only one full-time aural service. It also argues that the proposal should be rejected because the petition failed to demonstrate that Stoughton, which is in the Madison Urbanized Area, is sufficiently independent of the urbanized area to warrant the

[1] *Portage and Stoughton, Wisconsin*, Notice of Proposed Rule Making, 19 FCC Rcd 10972 (MB 2004).

[2] Mid-West is the licensee of Stations WTUX(AM), WMNG(FM),WTDY(AM) and WLMV(FM), Madison, Wisconsin, Station WJJO(FM), Watertown, Wisconsin, Station WWQM-FM, Middleton, Wisconsin, Stations WLMV(AM), and WHIT-FM, DeForest, Wisconsin.

[3] Petitioner also filed a request for waiver of the due date for comments because it did not receive a copy of the *Notice* from the Commission. Since no party will be prejudiced, we will accept Petitioner's late-filed comments and its timely filed comments in order to have a complete record.

[4] *See Amendment of the Commission's Rules Regarding Modification of FM and TV Authorizations to Specify a New Community of License ("Change of Community R&O")*, 4 FCC Rcd 4870 (1989), *recon. granted in part*, 5 FCC Rcd 7094 (1990).

[5] *See Revision of FM Assignment Policies and Procedures*, 90 FCC2d 88, 91 (1988). The FM Allotment priorities are: (1) first full-time aural service; (2) second full-time aural service; (3) first local service; (4) other public interest matters. [Co-equal weight is given to given to priorities (2) and (3)].

award of a first local service priority. It further argues that the proposal will not result in a preferential arrangement of allotments because Portage is a rural community in need of third aural service, rather than an additional service to well served Madison.

4. In its comments, Petitioner reiterates its support for the proposal and pledges to apply for the new station at Stoughton if it is approved. In its reply comments, Petitioner responds to the opposition by stating first that there will be no gray area, and in fact the entire loss area will be well served, except for 82 persons who will receive two nighttime services. Petitioner states that such analyses reflect the interference-free predicted contours of stations, and, as a practical matter, since station signals are received beyond their protected signal contours, those 82 people likely receive all of the same nighttime services as the rest of the loss area. Petitioner recognizes that it was mistaken in its representation that Stoughton was not part of the Urbanized Area, acknowledges that Stoughton is part of the Madison Urbanized Area, and provides an analysis of the community using the factors outlined in *Faye and Richard Tuck, Inc.*,[6] to show that Stoughton is independent of the Urbanized Area.

Discussion

5. First, we agree with Petitioner that the proposal would not create any gray area, and that 58 persons would receive only two fulltime services. We also credit Petitioner's analysis and determine that Stoughton is independent of the Madison Urbanized Area under the *Tuck* analysis. Stoughton meets a majority of the factors.

6. Under *Tuck*, we first look at the relative size, proximity and signal population coverage of the smaller community and the larger central city to determine whether the smaller community appears to be interdependent of the larger one. Here, Stoughton has a relatively large population, 12,534 persons,[7] which is 3.8 percent of the population who live within the Madison Urbanized Area (329,533). In addition, Stoughton and Madison are relatively far apart (14.2 miles). Finally, the city grade signal of Station WBKY(FM) would cover only about 10 percent of the Urbanized Area.

7. We next consider the eight factors of interdependence. Stoughton was incorporated as a village in 1868 and as a city in 1882 and is listed in the U.S Census as a city. According to statistics listed by the Stoughton Chamber of Commerce, and based on the 1990 U.S. Census, 40.4 percent of Stoughton's residents work in that community and 34.4 percent work in Madison. No conflicting numbers are before us (Factor 1). There are two community newspapers, *The Stoughton Courier-Hub* and *The Great Dane*, as well as a local cable access channel, Station WSTO (Factor 2). Statements of the Mayor, City Council, City Clerk, Chief of the Fire Department, Financial Director, School Superintendent, Director of Emergency Medical Services, and Director of the Opera House all attest to the independence of the community and the perception of residents as to its independence (Factor 3). Stoughton has an elected mayor and city council as well as other elected and appointed officials (Factor

[6] 3 FCC Rcd 5374 (1988). The Commission considers the following factors in determining a community's interdependence with a central city: (1) the extent to which community residents work in the larger metropolitan area, rather than the specified community; (2) whether the smaller community has its own newspaper or other media that covers the community's local needs and interests; (3) whether community's leaders and residents perceive the specified community as being an integral part of, or separate from, the larger metropolitan area; (4) whether the specified community has its own local government and elected officials; (5) whether the smaller community has its own zip code or telephone book provided by the local telephone company; (6) whether the community has its own commercial establishments, health facilities, and transportation systems; (7) the extent to which the specified community and the central city are part of the same advertising market; and (8) the extent to which the specified community relies on the larger metropolitan area for various municipal services such as police, fire protection, schools, and libraries. Tuck, 3 FCC Rcd at 5378.

[7] Unless otherwise noted, all population figures refer to the 2000 U.S. Census.

4). It has its own zip code, post office, and telephone book (Factor 5). Numerous businesses, including Stoughton Trailers, Uniroyal, Nestle, Alliant Energy, and MillFab, Inc. are located there. Stoughton has its own hospital, clinics, nursing homes, and many individual medical practitioners. There is no independent transportation system, but Stoughton is not served by the separate Madison system (Factor 6). Stoughton has its own media which provide outlets for local advertising (Factor 7). Stoughton provides its own government, courts, police, fire and EMT services, water, gas and electric utilities, trash and recycling, schools, libraries and recreation services (Factor 8).

8. Accordingly, having found that Stoughton is a community for allotment purposes, Petitioner's proposal will serve the public interest, meets the requirements for reallotment set forth in *Change of Community R&O*, and will result in a preferential arrangement of allotments. Channel 240A can be reallotted at Stoughton at a site 10.2 kilometers (6.3 miles) southwest of the community.[8] The allotment of Channel 240A at Stoughton is mutually exclusive with the current use of Channel 240A at Portage. The community of Portage, population 9,728, will not be deprived of its only local service,[9] and no white or gray area will be created. Finally, the proposal will provide a first local aural transmission service at Stoughton, under Priority Three of the allotment priorities, which will result in a preferential arrangement of allotments over the retention of a third local aural transmission service at Portage, which would serve Priority Four.

9. The Commission will send a copy of this *Report and Order* in a report to be sent to Congress and the Government Accountability Office Pursuant to the Congressional Review Act.[10]

10. Accordingly, pursuant to the authority found in 47 U.S.C. Sections 4(i), 5(c)(1), 303 (g) and (r) and 307(b) and 47 C.F.R. Sections 0.61, 0.204(b) and 0.283, IT IS ORDERED That effective May 22, 2006, the FM Table of Allotments, 47 C.F.R. Section 73.202(b), IS AMENDED, with respect to the communities listed below, to read as follows:

Community	Channel
Portage, Wisconsin	261A
Stoughton, Wisconsin	240A

11. For further information concerning this proceeding, contact Victoria M. McCauley (202) 418-2180.

FEDERAL COMMUNICATIONS COMMISSION

John A. Karousos
Assistant Chief
Audio Division
Media Bureau

[8] The coordinates for Channel 240A at Stoughton are 42-50-21 NL and 89-16-59 WL.

[9] Stations WDDC(FM) and WPDR(AM) will remain in Portage.

[10] *See* Congressional Review Act, 5 U.S.C. §801(a)(1)(A).

United States of America

FEDERAL COMMUNICATIONS COMMISSION

FM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

MAGNUM COMMUNICATIONS, INC.
1021 NORTH SUPERIOR AVE.
SUITE 5
TOMAH WI 54660

Rodolfo F. Bonacci
Assistant Chief
Audio Division
Media Bureau

Facility ID: 39625

Call Sign: WBKY

Permit File Number: BMPH-20100810ABT

Grant Date: NOV 16 2010

The authority granted herein has no effect on the expiration date of the underlying construction permit.

This permit modifies permit no.: BPH-20080207APE.

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: MAGNUM COMMUNICATIONS, INC.

Station Location: WI-STOUGHTON

Frequency (MHz): 95.9

Channel: 240

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: Non-Directional

Antenna Coordinates: North Latitude: 42 deg 51 min 15 sec
West Longitude: 89 deg 17 min 41 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	2.65	2.65
Height of radiation center above ground (Meters):	146	146
Height of radiation center above mean sea level (Meters):	439	439
Height of radiation center above average terrain (Meters):	153	153

Antenna structure registration number: 1276118

Overall height of antenna structure above ground (including obstruction lighting if any) see the registration for this antenna structure.

Special operating conditions or restrictions:

1 ********* This is a Section 73.215 contour protection grant **********
********** as requested by this applicant **********

2 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.

*** END OF AUTHORIZATION ***

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
ANTENNA STRUCTURE REGISTRATION

OWNER: MAGNUM COMMUNICATIONS, INC.

FCC Registration Number (FRN): 0003776754

ATTN: DAVID MAGNUM MAGNUM COMMUNICATIONS, INC. 1021 NORTH SUPERIOR AVE., SUITE 5 TOMAH, WI 54660	**Antenna Structure Registration Number** 1276118 **Issue Date** 09-27-2010
Location of Antenna Structure 3768 Old Stage Road Oregon, WI	**Ground Elevation (AMSL)** 293.2 meters **Overall Height Above Ground (AGL)** 149.0 meters
Latitude 42-51-15.4 N **Longitude** 089-17-41.3 W **NAD83**	**Overall Height Above Mean Sea Level (AMSL)** 442.2 meters

Painting and Lighting Requirements:
FAA Chapters 3, 4, 5, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K

Conditions:

This registration is effective upon completion of the described antenna structure and notification to the Commission. **YOU MUST NOTIFY THE COMMISSION WITHIN 24 HOURS OF COMPLETION OF CONSTRUCTION OR CANCELLATION OF YOUR PROJECT, please file FCC Form 854.** To file electronically, connect to the antenna structure registration system by pointing your web browser to http://wireless.fcc.gov/antenna. Electronic filing is recommended. You may also file manually by submitting a paper copy of FCC Form 854. Use purpose code "NT" for notification of completion of construction; use purpose code "CA" to cancel your registration.

The Antenna Structure Registration is not an authorization to construct radio facilities or transmit radio signals. It is necessary that all radio equipment on this structure be covered by a valid FCC license or construction permit.

You must immediately provide a copy of this Registration to all tenant licensees and permittees sited on the structure described on this Registration (although not required, you may want to use Certified Mail to obtain proof of receipt), and *display* your Registration Number at the site. See reverse for important information about the Commission's Antenna Structure Registration rules.

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76137

Aeronautical Study No.
2013-AGL-11021-OE
Prior Study No.
2012-AGL-10311-OE

Issued Date: 11/19/2013

Dave Magnum
Magnum Communications, Inc.
N6837 Bobbi Road
Pardeeville, WI 53954

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Brooklyn Tower
Location:	Brooklyn, WI
Latitude:	42-51-15.46N NAD 83
Longitude:	89-17-41.31W
Heights:	962 feet site elevation (SE)
	489 feet above ground level (AGL)
	1451 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure should continue to be marked/lighted utilizing paint/red lights.

Based on this evaluation, we have no objection to the request to deviate from the standards outlined in the FAA Advisory Circular 70/7460-1 K Change 2 Obstruction Marking and Lighting, Chapter 5.

This deviation from the standard does not apply to any marking and/or paint conditions.

The FAA finds that for those towers 151-350 feet AGL that normally require only one top mounted Flashing Red Obstruction (L-864) light and one level of Steady-burning Red Obstruction (L-810) lights, it is necessary to either configure the existing L-810s to flash at the same rate as the L-864 or replace the L-810 with a L-864 configured to flash simultaneously. Flash rates must be 30 flashes per minute (± 3 flashes).

The FAA finds that for structures 351 feet AGL and above, the absence of steady burning Red Obstruction (L-810) lights on this structure will not impair aviation safety. However, aeronautical study revealed that the structure should continue to be lighted with the appropriate Flashing Red Obstruction (L-864) lights. Flash rates must be 30 flashes per minute (± 3 flashes).

This determination of No Hazard is granted provided the following conditional statement is included in the proponent's construction permit or license to radiate:

Upon receipt of notification from the Federal Communications Commission that harmful interference is being caused by the licencee's (permittee's) transmitter, the licensee (permittee) shall either immediately reduce the power to the point of no interference, cease operation, or take such immediate corrective action as is necessary to eliminate the harmful interference. This condition expires after 1 year of interference-free operation.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (847) 294-7575. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AGL-11021-OE.

Signature Control No: 201570670-202040560 (DNE)
Vivian Vilaro
Specialist

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2013-AGL-11021-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
95.9	95.9	MHz	6	kW

WISCONSIN DEPARTMENT *of* TRANSPORTATION
4802 Sheboygan Avenue
Madison, Wisconsin 53707

PERMIT
TO ERECT A TALL STRUCTURE

The *Wisconsin Department of Transportation*, pursuant to Section 114.135, Wisconsin Statutes, and Trans. 56, Wisconsin Administrative Code, authorizes *Magnum Communications*, N6837 Bobbi Road, Pardeeville WI 53954 to erect an antenna tower near Brooklyn, WI at the following location under the following conditions:

42° 51' 15.46" North Latitude, 089° 17' 41.31" in the SW ¼ of the NE ¼ of Section 34, Town 05 N, Range 10 E, Dane County, Wisconsin.

(1) The height of the tower including appurtenances shall not exceed **499** feet above the ground level at the base of the structure.

(2) The maximum elevation of the top of the tower including appurtenances shall not exceed **1461** feet above mean sea level.

(3) In accordance with FAA determination 10-AGL-4730-OE, you shall mark and light the tower in accordance with FAA publication AC-70/7460-1K, Change 1, Obstruction Marking and Lighting, chapters 3 (marked), 4, 5 (red), and 12.

(4) In the event this structure is no longer used, the owner shall notify the *Wisconsin Department of Transportation, Bureau of Aeronautics* immediately, and the permit will expire three months after such notice is received.

APPROVED:

Frank J. Busalacchi, Secretary
Department of Transportation

(SEAL)

by:

03 JAN 11
Date:

Scott R. Brummond, Chief
Aeronautical/Technical Services
Bureau of Aeronautics