

SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant

West Central Michigan Media Ministries

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)



Station License (As Amended)



Direct Measurement of Power

1. Facilities authorized in construction permit

| Call Sign | File No. of Construction Permit (if applicable) | Frequency (kHz) | Hours of Operation | Power in kilowatts | |
|-------------|--|--------------------|--------------------|----------------------|-----------------|
| | | | | Night Critical Hours | Day |
| KTGG | BP-20080124ACW | 1540 kHz | Unlimited | 0.219 kW | 0.400 kW |

2. Station location

| | |
|--------------------------|-------------------------------|
| State Michigan | City or Town Okemos |
|--------------------------|-------------------------------|

3. Transmitter location

| | | | |
|--------------------------|-------------------------|--------------------------------|--|
| State Michigan | County Ingham | City or Town Lansing | Street address (or other identification) 2150 E Main Street |
|--------------------------|-------------------------|--------------------------------|--|

4. Main studio location

| | | | |
|--------------------------|--------------------------|---------------------------------|---|
| State Michigan | County Wexford | City or Town Cadillac | Street address (or other identification) PO Box 567 (main studio waiver in effect) |
|--------------------------|--------------------------|---------------------------------|---|

5. Remote control point location (specify only if authorized directional antenna)

| | | | |
|-------|--------|--------------|---|
| State | County | City or Town | Street address (or other identification) |
|-------|--------|--------------|---|

6. Has type-approved stereo generating equipment been installed?



Yes



No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?



Yes



No



Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed.

Exhibit No.

8. Operating constants:

| | |
|--|---|
| RF common point or antenna current (in amperes) without modulation for Night System Critical Hours System 1.92 amperes | RF common point or antenna current (in amperes) without modulation for day system 2.60 amperes |
| Measured antenna or common point resistance (in ohms) at operating frequency Night Critical Hours 59.27 ohms Day 59.27 ohms | Measured antenna or common point reactance (in ohms) at operating frequency Night Critical Hours - j 45.15 ohms Day - j 45.15 ohms |

Antenna indications for directional operation

| Towers | Antenna monitor Phase reading(s) in degrees | | Antenna monitor sample current ratio(s) | | Antenna base currents | |
|--------|--|-----|--|-----|-----------------------|-----|
| | Night | Day | Night | Day | Night | Day |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Manufacturer and type of antenna monitor:

SECTION III - Page 2

9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

| | | | | |
|--|--|--|--|---|
| Type Radiator One, guyed, uniform cross-section steel tower mounted on a concrete base pier and insulator. | Overall height in meters of radiator above base insulator, or above base, if grounded. 97.5 meters | Overall height in meters above ground (without obstruction lighting) 98.4 meters | Overall height in meters above ground (include obstruction lighting) 99.3 meters | If antenna is either top loaded or sectionalized, describe fully in an Exhibit. <div>Exhibit No.</div> |
|--|--|--|--|---|

Excitation



Series



Shunt

NDA Tower = ASR #1055176

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

| | | | | | | | |
|----------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|
| North Latitude | 42 ° | 43 ' | 13 " | West Longitude | 84 ° | 31 ' | 11 " |
|----------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Exhibit No.
See Vertical Plan

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

Exhibit No.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

The facility, as constructed, consists of one single AM tower broadcasting the recently dplexed signals of KTGG(AM) - Okemos, MI, Facility ID: 61993, (BP-20080124ACW) and WJIM(AM) - Lansing, MI, Facility ID: 17382, (BL-19971226KA); in addition to housing recently co-located FM Translator W284AH - Lansing, MI, Facility ID: 77818, (BP-20151216ABP) and existing STL License WLF273. In this instance, a correction of coordinates of less than three seconds was also noted during the preparation of this Form 302-AM filing with regard to this facility. This correction has been requested here-in.

11. Give reasons for the change in antenna or common point resistance.

This Form 302-AM is being filed to reflect the new antenna resistance and reactance measurements associated with the recent construction as authorized by KTGG(AM) - Okemos, MI, Facility ID: 61993, Construction Permit BP-20080124ACW and W284AH - Lansing, MI, Facility ID: 77818, Construction Permit BP-20151216ABP and as further amended for additional tower lighting work subsequent to the original filing. Concerning KTGG(AM) - Okemos, MI, Facility ID: 61993, Construction Permit BP-20080124ACW, a summary of the Special Conditions/Restrictions as required by BP-20080124ACW has also been included here-in.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

| | |
|---|---|
| Name (Please Print or Type) Justin W. Asher | Signature (check appropriate box below)  |
| Address (include ZIP Code) P.O. Box 220 385 Airport Drive Coldwater, MI 49036 | Date September 9, 2016 Telephone No. (Include Area Code) 1(517)278-7339 |



Technical Director



Registered Professional Engineer



Chief Operator



Technical Consultant



Other (specify)

Explanation of Special Conditions/Restrictions

KTGG(AM) - Okemos, MI

Facility ID: 61993

BP-20080124ACW

1. The permittee certifies it has installed a type accepted transmitter, therefore no further documentation as prescribed by Section 73.1660(b) is required.
2. The permittee certifies a license application (FCC Form 302) to cover this construction permit has been filed with the Commission pursuant to Section 73.3536 of the Rules before the permit expires. This permit is set to expire on July 30, 2017.
3. The permittee acknowledges it shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.
4. The permittee certifies sufficient measurements have been taken and submitted showing that adequate filters, traps and other equipment has been installed and adjusted to prevent interaction, intermodulation and/or generation of spurious radiation products which may be caused by common usage of the same antenna system by Stations KTGG(AM) (ID#61993) and WJIM(AM) (ID#17382). In addition, the permittee certifies that it has obtained and submitted here-in a copy of a firm agreement entered into by the two stations involved clearly fixing the responsibility of each with regard to the installation and maintenance of such equipment. In addition, field observations have been made determining that no spurious emissions exist nor any objectionable problems have resulted from the combined operation. Following construction, and prior to authorization of program test under this grant, BOTH stations have measured their antenna or common point resistance and submitted FCC Form 302 applications notifying the return to direct measurement of power.
5. The permittee certifies the ground system remains/consists of 120 equally spaced, buried, copper radials about the base of the tower, each 60.5 meters in length except where terminated by property boundaries.
6. Special Condition/Restriction Number Six (6) reads, "*The WJKN Application (File No. BP-20060627ACB) and the KTGG Application (File No. BP-20080124ACW) were filed as part of an interference reduction agreement due to prohibited daytime groundwave overlap between the WJKN proposal and the currently licensed KTGG facility. As a result, both PTA and license applications for both stations must be granted simultaneously.*" This Condition has been rendered moot as WJKN Application (File No. BP-20060627ACB) was subsequently superseded by WJKN Application (File No. BP-20131125BRH) and licensed under WJKN License (File No. BL-20140725BRH). Inspection of the granted WJKN Construction Permit Application (File No. BP-20131125BRH) indicates the removal of the previous interference reduction agreement condition. In addition, inspection of the granted WJKN License Application (File No. BL-20140725BRH) further indicates the removal of the previous interference reduction agreement condition as well. Therefore no further action is believed necessary with regard to WJKN.
7. The permittee acknowledges is must submit the information as required pursuant to 47 CFR Section 73.99(e) if a Presunrise (PSRA) and/or Postsunset Authorization (PSSA) is desired. At this time no PSRA or PSSA will be filed.

***While not a specific Condition/Restriction on this Construction Permit, the permittee, West Central Michigan Media Ministries, wishes to acknowledge it has previously requested and received a waiver of 47. C.F.R. Section 73.1125 to operate the facility as "satellite" of co-owned noncommercial educational FM station WGCP, Cadillac, MI, (Facility ID No.: 174643). The permittee respectfully requests a continuation of this Main Studio Waiver (Satellite Facility) grant.

ANTENNA SITE MAINTENANCE AGREEMENT

This Antenna Site Maintenance Agreement (this "Agreement") is made this 18th _____ day of August, 2016 by and between WEST CENTRAL MICHIGAN MEDIA MINISTRIES ("Lessee") and TOWNSQUARE MEDIA LANSING, LLC ("Lessor"). This Agreement is a supplement statement to that certain Building and Tower Use Agreement (the "Use Agreement") between Lessor and Lessee granted to be effective June 22, , 2016.

Pursuant to the Use Agreement, Lessor and Lessee have agreed to operate Lessor's radio station WJIM and Lessee's radio station KTGG from a common antenna site and through a single combined antenna system. For the purposes of implementing that cooperative joint operation, the parties agree as follows:

Lessor shall be solely responsible, at its sole cost and expense, for maintaining the property at the antenna site, including the transmitter building, and for maintenance and repair of the tower; provided that Lessor and Lessee shall share equally (i.e. 50% each) responsibility and expense for maintenance and repairs of the Diplexer/ATU and HVAC units. Lessor and Lessee shall also share equally the costs associated with installing filters and traps as may be necessary.

Lessor shall not be responsible or liable to Lessee for any inconvenience or annoyance to Lessee arising from the repair or maintenance of the antenna tower or the transmitter building.

This Agreement summarizes Section 9 "Tower and Property Maintenance" of the Use Agreement and does not supersede or modify any terms of said Use Agreement.

IN WITNESS WHEREOF, this Lease has been duly executed and delivered by Lessor and Lessee on the date first above written.

LESSOR:

Townsquare Media Lansing, LLC

By: _____

Name: _____

Title: _____

[Signature]
ZOE B. FLY
Market President / RVP

LESSEE

West Central Michigan Media Ministries

By: _____

Name: _____

Title: _____

[Signature]
David Bolduc
President - West Central MI Media Min.

ENGINEERING REPORT

Spurious Emissions Measurement Study

associated with the
combined operations of

KTGG(AM).C (Fac ID: 61993)
Okemos, MI
BP-20080124ACW

WJIM(AM).L (Fac ID: 17382)
Lansing, MI
BL-19971226KA

August, 2016

COPYRIGHT 2016

RF Signal Spurious Emissions Study for the Combined Operations of KTGG(AM).C - Okemos, MI & WJIM(AM).L - Lansing, MI

This firm has been retained to prepare the required engineering report in support of this Spurious Emissions Measurement Study for the combined operation of AM Station(s) KTGG(AM).C - Okemos, MI and WJIM(AM).L - Lansing, MI onto the tower identified by Antenna Structure Registration Number #1055176. This study is associated with, and a condition of licensing for, KTGG(AM).C Construction Permit BP-20080124ACW.

KTGG(AM).C operates on 1540 kHz with a daytime non-directional power of 0.400 kW and a critical hours non-directional power of 0.219 kW. WJIM(AM) operates on 1240 kHz with a daytime non-directional power of 0.890 kW and a nighttime non-directional power of 0.890 kW. As stated before, the common tower is identified as ASR #1055176 and employs a radiating element 97.5 meters in length. This element functions as a 180.4° (0.501 λ) element for the KTGG(AM) operational frequency of 1540 kHz, and a 145.2° (0.403 λ) element for the WJIM(AM) operational frequency of 1240 kHz. The common element is matched with a Kintronics Laboratories, Inc., Band-Pass; Band-Reject Diplexer Number 112971-Custom(WJIM/KTGG). Factory settings were matched employing information from the FCC database concerning the KTGG(AM).C and WJIM(AM).L operating parameters; and manufacturer specifications for the diplexer.

RF signal purity measurements were conducted during the equipment test operations associated with , KTGG(AM).C Construction Permit BP-20080124ACW. Measurements were conducted by Mr. Edmond Trombley, a staff engineer in the employ of Munn-Reese, Inc. Mr. Trombley conducted his measurements with the AM transmitters in full operation employing the Kintronics Combiner for the common AM operations. A broad spectral sweep found no obvious products above the analyzer noise floor. Using a computer generated mixing product chart, high resolution, low noise floor measurements were also made out to the 1st, 2nd and 3rd order. With the exception of noted carrier frequencies, the suppression of the mixing products tabulated here-in exceed the minimum suppression required for each station.

Attached as **Exhibit A** is a copy of the 1st, 2nd and 3rd order potential mixing product measurement results for the harmonic relationships associated with the 1240 kHz and 1540 kHz combined operations. A Schematic diagram of the Kintronics Laboratories Diplexer/Combiner has been included in **Exhibit B**. As a result of these studies, it has been concluded the combined operations of KTGG(AM).C and WJIM(AM).L meets or exceeds the requirements of the special condition of licensing associated with KTGG(AM).C Construction Permit BP-20080124ACW.

CERTIFICATION OF ENGINEER

The data utilized in this report was taken from the FCC Secondary Database and data on file. While this information is believed accurate, errors or omissions in the database and file data are possible. This firm may not be held liable for damages as a result of such data errors or omissions.

The report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission. I declare under penalty of the laws of perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

August 4, 2016

By 

Edmond R. Trombley, Staff Engineer
MUNN-REESE, INC.
Broadcast Engineering Consultants
COLDWATER, MI 49036-0220
517-278-7339 (x105)
et@munnn-reese.com

By 

Justin W. Asher, Staff Engineer
MUNN-REESE, INC.
Broadcast Engineering Consultants
COLDWATER, MI 49036-0220
517-278-7339 (x107)
justin@munnn-reese.com

Exhibit A - Tabulation of Potential Mixing Products

KTGG(AM).C - Okemos, MI & WJIM(AM).L - Lansing, MI

| Frequency (kHz) | Measured Level (dBc) | Frequency (MHz) | Measured Level (dBc) | Frequency (MHz) | Measured Level (dBc) | Frequency (MHz) | Measured Level (dBc) |
|-----------------|----------------------|-----------------|----------------------|-----------------|----------------------|-----------------|----------------------|
| 600 kHz | -94.8 dBc | 2780 kHz | -96.7 dBc | 4960 kHz | -97.5 dBc | | |
| 940 kHz | -84.3 dBc | 3080 kHz | -93.4 dBc | | | | |
| 1240 kHz | WJIM(AM) Carrier* | 3720 kHz | -82.8 dBc | | | | |
| 1540 kHz | KTGG(AM) Carrier* | 4020 kHz | -97.5 dBc | | | | |
| 1840 kHz | -82.6 dBc | 4320 kHz | -94.8 dBc | | | | |
| 2480 kHz | -91.1 dBc | 4620 kHz | -93.4 dBc | | | | |

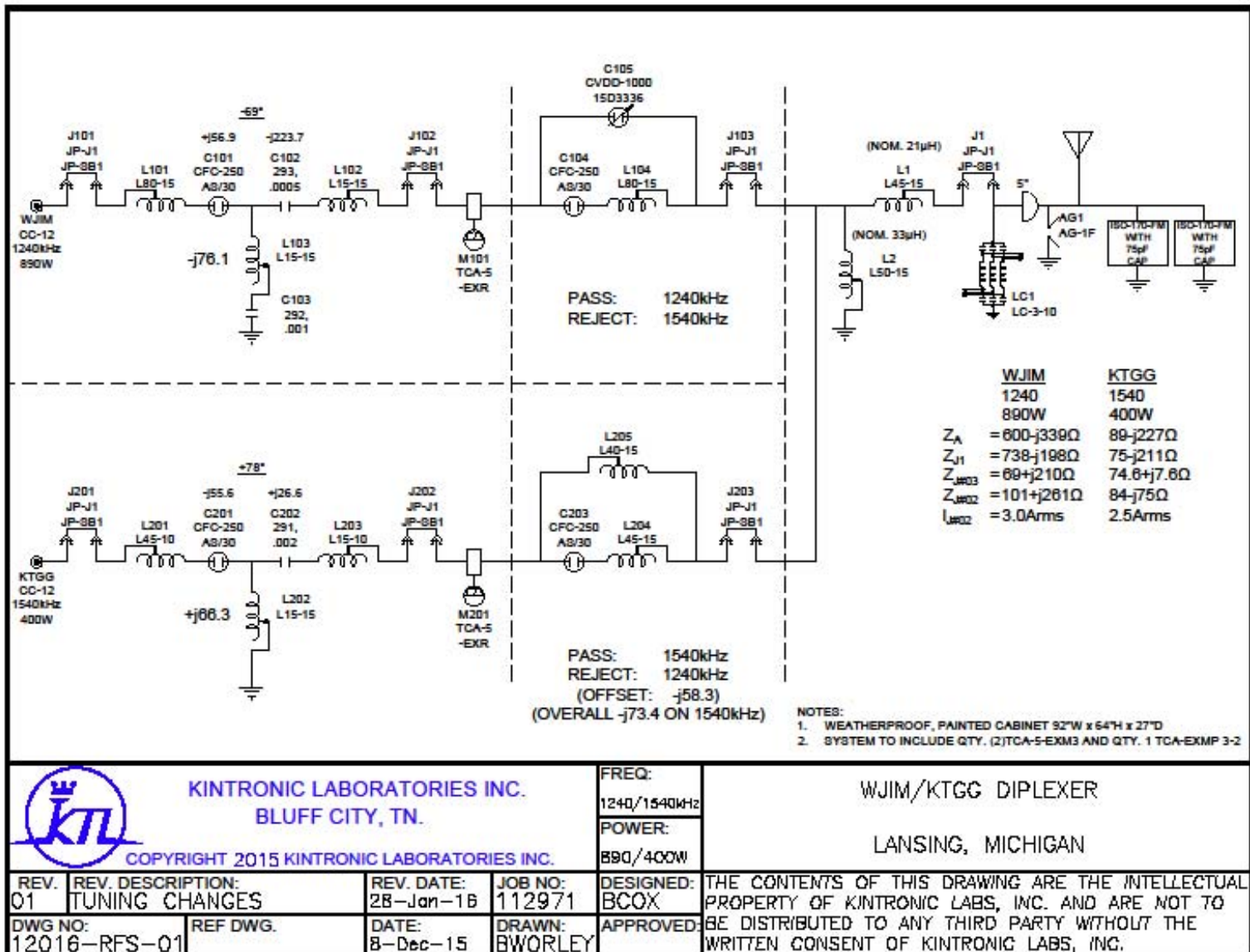
*No intermodulation mixing was noted on any carrier frequencies.

WJIM(AM) - minimum attenuation Level: -69.0 dBc (890 watts ERP)

KTGG(AM) - minimum attenuation Level: -72.5 dBc (400 watts ERP)

Exhibit B - Schematic Documentation of Combiner Design/Installation

KTGG(AM).C - Okemos, MI & WJIM(AM).L - Lansing, MI



**ENGINEERING REPORT
OCCUPIED SPECTRUM ANALYSIS**

CFR 47 §73.44 Compliance

KTGG(AM) - Lansing, MI

1540 kHz

July 2016

COPYRIGHT 2016

MUNN-REESE, INC.
Broadcast Engineering Consultants
Coldwater, MI 49036

AM OCCUPIED SPECTRUM ANALYSIS

Station Data

Call: KTGG

City of License: Lansing, MI

Frequency: 1540 kHz

Operating Mode: NDD

Schedule: Daytime

Day Power: 0.40 kW

Critical Hours Power 0.219 kW

Facility ID: 61993

Measurement Date: 07/29/2016

Discussion

The measurement data obtained for this report indicates the operation of KTGG to be IN COMPLIANCE with the provisions of CFR 47 §73.44 of the FCC rules regarding AM Broadcast Stations. Occupied Spectrum measurements were taken during the regular broadcast day by Edmond R. Trombley, staff engineer in the regular employ of Munn-Reese, Inc. In addition, spurious emission and harmonic measurements were made using a calibrated field strength meter. All measurements were made within 1 km of the transmitter, to provide sufficient signal to the analyzer.

Equipment employed

Anritsu MS2721B Spectrum Master. Technical specifications of the Anritsu MS2721B are available on the Internet at www.anritsu.com.

Potomac Instruments FIM-41, Field Meter, Serial No: 1149. Calibration Date: 05/04/2016. Technical specifications of the FIM-41 field intensity meter are available at www.pi-usa.com.

EXHIBITS

Measured Carrier Frequency – 1,540,004.277 Hz.

Figure A - Plot of Occupied Spectrum – Span 50 kHz

Figure B - Plot of Occupied Spectrum – Span 200 kHz

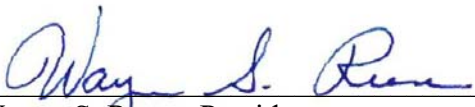
Figure C - Tabulation of Harmonic Measurement Data

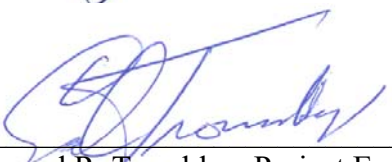
HARMONIC MEASUREMENT DATA

| | | |
|-----------------------|------------|---------------------------|
| Operating Power: | 0.40 kW | |
| Required Attenuation: | -69.02 dB | |
| Fundamental Field: | 470 mV/M | |
| Second Harmonic: | 0.011 mV/m | -92.61 dB below reference |
| Third Harmonic: | 0.013 mV/m | -91.16 dB below reference |

This report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission. I declare under penalty of laws of perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

July, 29, 2016

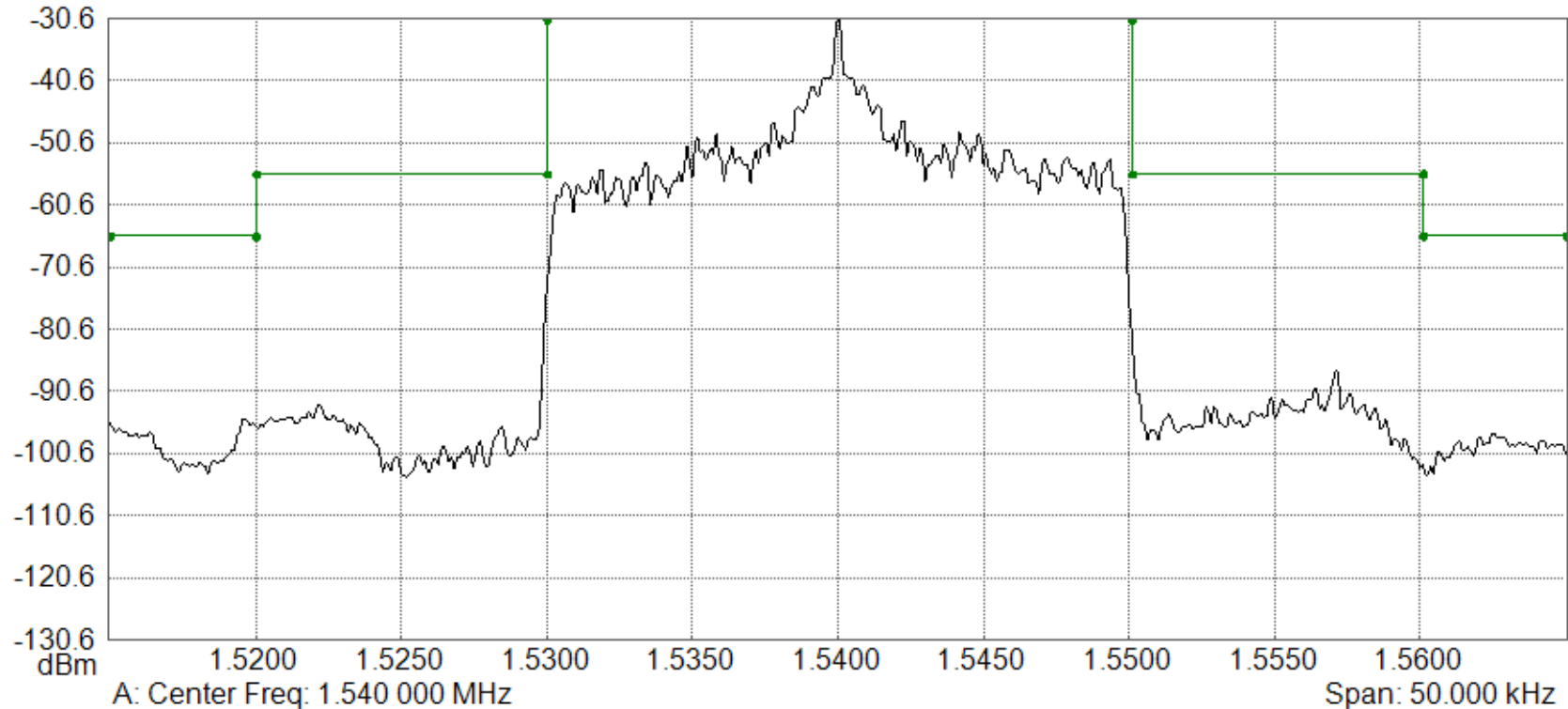
By 
Wayne S. Reese, President

By 
Edmond R. Trombley, Project Engineer

Spectrum Analyzer Data

KTGG-A (7/27/2016 1:58:46 PM)

Spectrum Analyzer



Trace A data:

Trace Mode = Max Hold

Preamplifier = OFF

Min Sweep Time = 0.001 S

Reference Level Offset = 0 dB

Input Attenuation = 0.0 dB

RBW = 100.0 Hz

VBW = 30.0 Hz

Detection = Peak

Center Frequency = 1.540 000 MHz

Start Frequency = 1.515 000 MHz

Stop Frequency = 1.565 000 MHz

Frequency Span = 50.000 000 kHz

Reference Level = -30.600 dBm

Scale = 10.0 dB/div

Serial Number = 1002033

Base Ver. = V4.32

App Ver. = V5.73

Model = MS2721B

Options = 9, 20, 31

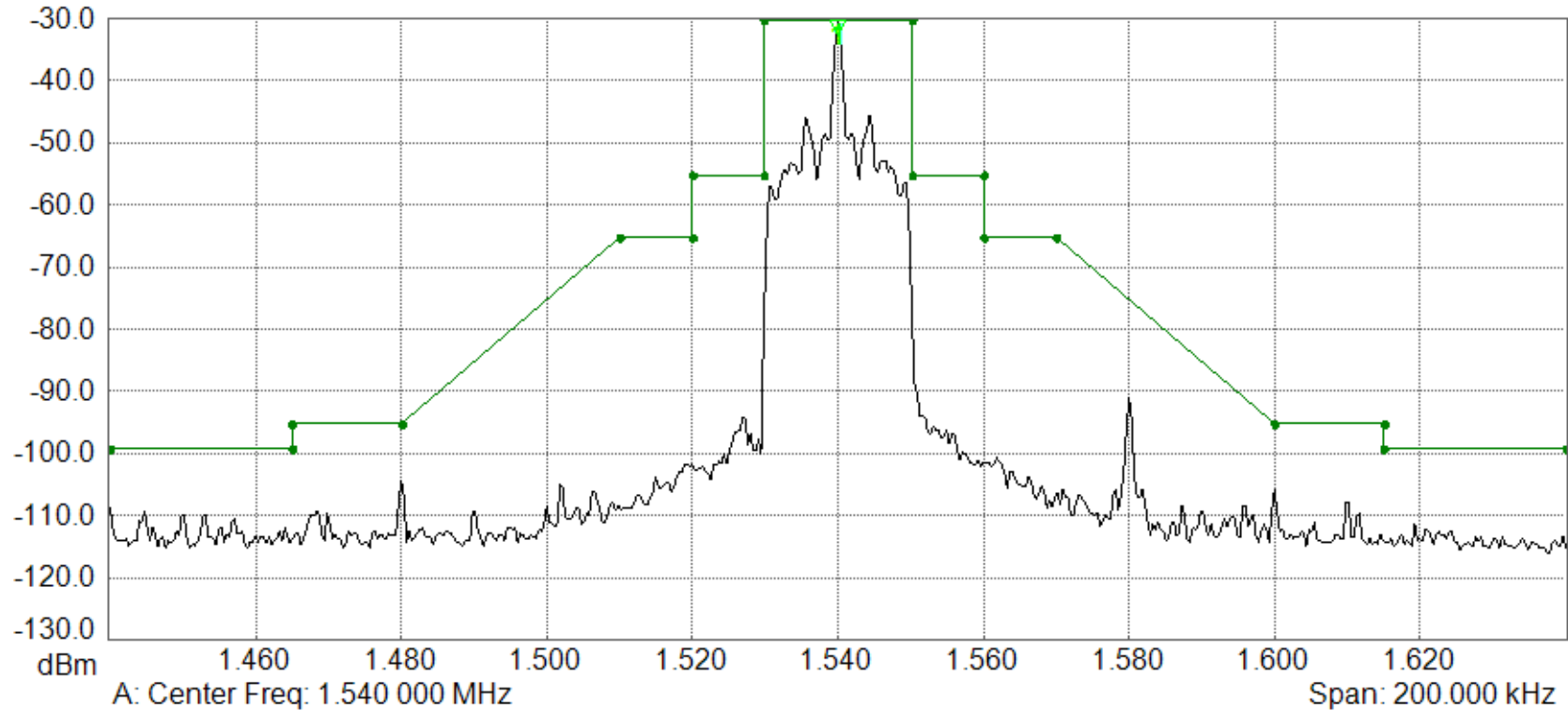
Date = 7/27/2016 1:58:46 PM

Device Name =

Spectrum Analyzer Data

KTGG-B (7/27/2016 1:44:32 PM)

Spectrum Analyzer



Trace A data:

Trace Mode = Max Hold

Preamp = OFF

Min Sweep Time = 0.001 S

Reference Level Offset = 0 dB

Input Attenuation = 0.0 dB

RBW = 300.0 Hz

VBW = 100.0 Hz

Detection = Peak

Center Frequency = 1.540 000 MHz

Start Frequency = 1.440 000 MHz

Stop Frequency = 1.640 000 MHz

Frequency Span = 200.000 000 kHz

Reference Level = -30.000 dBm

Scale = 10.0 dB/div

Serial Number = 1002033

Base Ver. = V4.32

App Ver. = V5.73

Model = MS2721B

Options = 9, 20, 31

Date = 7/27/2016 1:44:32 PM

Device Name =

**ENGINEERING REPORT
OCCUPIED SPECTRUM ANALYSIS**

CFR 47 §73.44 Compliance

WJIM(AM) – Lansing, MI

1240 kHz

July 2016

COPYRIGHT 2016

MUNN-REESE, INC.
Broadcast Engineering Consultants
Coldwater, MI 49036

AM OCCUPIED SPECTRUM ANALYSIS

Station Data

Call: WJIM

City of License: Lansing, MI

Frequency: 1240 kHz

Operating Mode: ND2

Schedule: unlimited

Day Power: 0.89 kW

Facility ID: 17382

Measurement Date: 07/27/2016

Discussion

The measurement data obtained for this report indicates the operation of WJIM to be IN COMPLIANCE with the provisions of CFR 47 §73.44 of the FCC rules regarding AM Broadcast Stations. Occupied Spectrum measurements were taken during the regular broadcast day by Edmond R. Trombley, staff engineer in the regular employ of Munn-Reese, Inc. In addition, spurious emission and harmonic measurements were made using a calibrated field strength meter. All measurements were made within 1 km of the transmitter, to provide sufficient signal to the analyzer.

Equipment employed

Anritsu MS2721B Spectrum Master. Technical specifications of the Anritsu MS2721B are available on the Internet at www.anritsu.com.

Potomac Instruments FIM-41, Field Meter, Serial No: 1149. Calibration Date: 05/04/2016. Technical specifications of the FIM-41 field intensity meter are available at www.pi-usa.com.

EXHIBITS

Measured Carrier Frequency – 1,239,997.318 Hz.

Figure A - Plot of Occupied Spectrum – Span 50 kHz

Figure B - Plot of Occupied Spectrum – Span 200 kHz

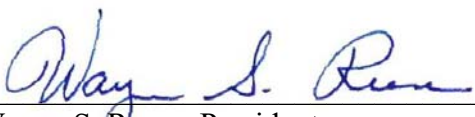
Figure C - Tabulation of Harmonic Measurement Data


HARMONIC MEASUREMENT DATA

| | | |
|-----------------------|------------|----------------------------|
| Operating Power: | 0.89 kW | |
| Required Attenuation: | -72.49 dB | |
| Fundamental Field: | 1825 mV/M | |
| Second Harmonic: | 0.023 mV/m | -97.99 dB below reference |
| Third Harmonic: | 0.034 mV/m | -94.60 dB below reference |
| Forth Harmonic: | 0.010 mV/m | -105.23 dB below reference |

This report has been prepared by properly trained electronics specialists under the direction of the undersigned whose qualifications are a matter of record before the Federal Communications Commission. I declare under penalty of laws of perjury that the contents of this report are true and accurate to the best of my knowledge and belief.

July 29, 2016

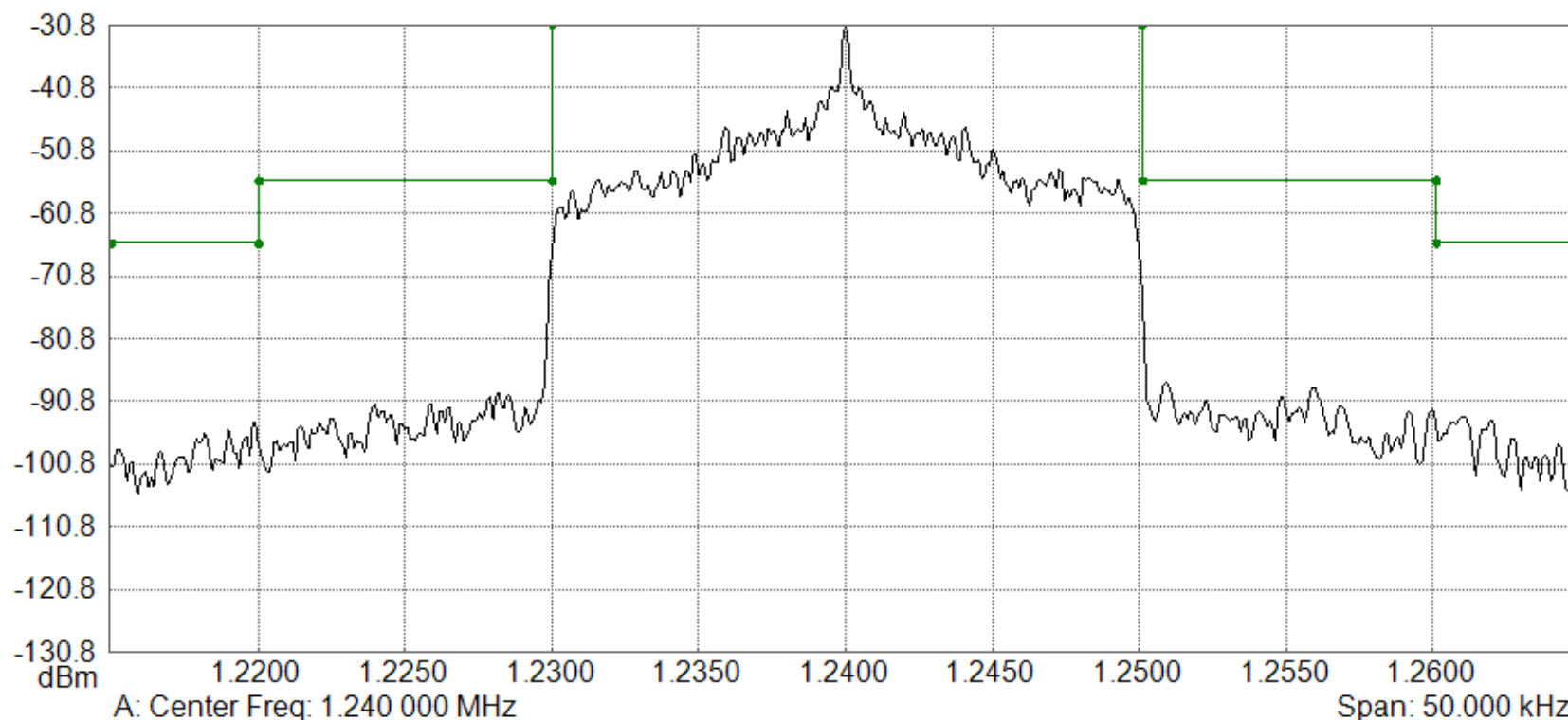
By 
Wayne S. Reese, President

By 
Edmond R. Trombley, Project Engineer

Spectrum Analyzer Data

WJIM-A (7/27/2016 1:34:20 PM)

Spectrum Analyzer



Trace A data:
 Trace Mode = Max Hold
 Preamplifier = OFF
 Min Sweep Time = 0.001 S
 Reference Level Offset = 0 dB
 Input Attenuation = 0.0 dB
 RBW = 100.0 Hz
 VBW = 30.0 Hz

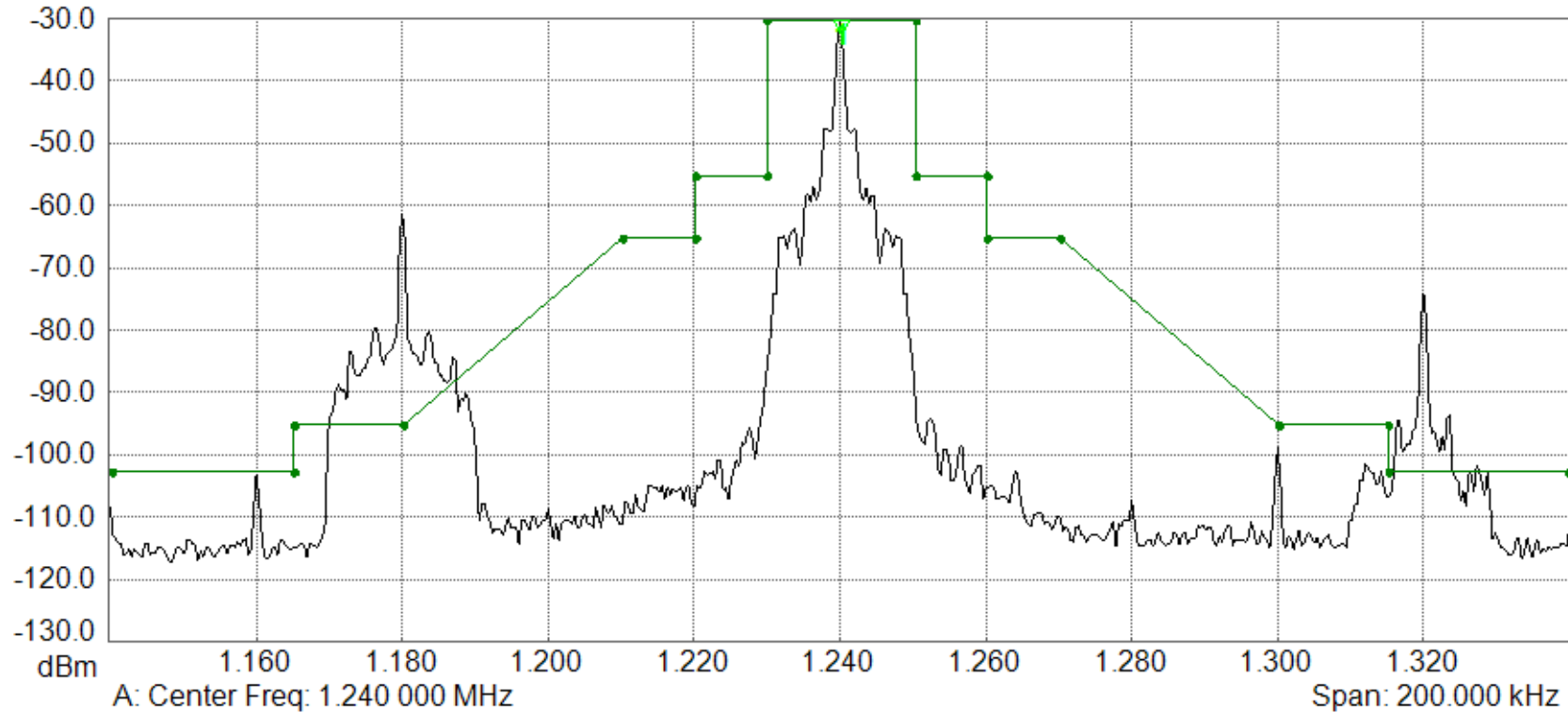
Detection = Peak
 Center Frequency = 1.240 000 MHz
 Start Frequency = 1.215 000 MHz
 Stop Frequency = 1.265 000 MHz
 Frequency Span = 50.000 000 kHz
 Reference Level = -30.800 dBm
 Scale = 10.0 dB/div
 Serial Number = 1002033

Base Ver. = V4.32
 App Ver. = V5.73
 Model = MS2721B
 Options = 9, 20, 31
 Date = 7/27/2016 1:34:20 PM
 Device Name =

Spectrum Analyzer Data

WJIM-B (7/27/2016 1:19:59 PM)

Spectrum Analyzer



Trace A data:

Trace Mode = Max Hold

Preamplifier = OFF

Min Sweep Time = 0.001 S

Reference Level Offset = 0 dB

Input Attenuation = 0.0 dB

RBW = 300.0 Hz

VBW = 100.0 Hz

Detection = Peak

Center Frequency = 1.240 000 MHz

Start Frequency = 1.140 000 MHz

Stop Frequency = 1.340 000 MHz

Frequency Span = 200.000 000 kHz

Reference Level = -30.000 dBm

Scale = 10.0 dB/div

Serial Number = 1002033

Base Ver. = V4.32

App Ver. = V5.73

Model = MS2721B

Options = 9, 20, 31

Date = 7/27/2016 1:19:59 PM

Device Name =

Correction of Coordinate Packet (1 of 4) Okemos, MI KTGG(AM) - Copy of Existing Antenna Structure Registration



Registration Detail

| | | | |
|-------------|----------|-------------|------------|
| Reg Number | 1055176 | Status | Granted |
| File Number | A1042202 | Constructed | 12/07/1996 |
| EMI | No | Dismantled | |
| NEPA | No | | |

Antenna Structure

Structure Type GTOWER - Guyed Structure Used for Communication Purposes

Location (in NAD83 Coordinates)

| | | | |
|--------------------|----------------------------|----------------------------|----------------|
| Lat/Long | 42-43-13.0 N 084-31-10.6 W | Address | 2150 E MAIN ST |
| City, State | LANSING , MI | | |
| Zip | 48912 | County | INGHAM |
| Center of AM Array | | Position of Tower in Array | |

Heights (meters)

| | |
|--|---|
| Elevation of Site Above Mean Sea Level | Overall Height Above Ground (AGL) |
| 253.8 | 99.3 |
| Overall Height Above Mean Sea Level | Overall Height Above Ground w/o Appurtenances |
| 353.1 | 99.3 |

Painting and Lighting Specifications

FAA Chapters 4, 8, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1L

FAA Notification

| | | | |
|-----------|------------------|----------------|------------|
| FAA Study | 2016-AGL-9288-OE | FAA Issue Date | 07/12/2016 |
|-----------|------------------|----------------|------------|

Owner & Contact Information

| | | | |
|-----|------------|-------------------|---------------------------|
| FRN | 0023438401 | Owner Entity Type | Limited Liability Company |
|-----|------------|-------------------|---------------------------|

Owner

Townsquare Media Lansing, LLC
Attention To: FCC Contact
240 Greenwich Ave
Greenwich , CT 06830

P: (203)861-0900
F:
E: fcccontact@townsquaremedia.com

Contact

Simpson , Mark M
Attention To: FCC Contact
240 Greenwich Ave
Greenwich , CT 06830

P: (203)900-5532
F:
E: mark.simpson@townsquaremedia.com

Last Action Status

| | | | |
|---------|--------------|----------|------------|
| Status | Granted | Received | 07/15/2016 |
| Purpose | Modification | Entered | 07/15/2016 |
| Mode | Interactive | | |

Related Applications

| | |
|------------|------------------------------|
| 07/15/2016 | A1042202 - Modification (MD) |
| 07/15/2016 | - Admin Update (AU) |
| 06/02/2016 | A1033874 - Admin Update (AU) |

Related applications (12)

Comments

Comments

None

History

| Date | Event |
|------------|---|
| 07/16/2016 | Registration Printed |
| 07/15/2016 | ASR Application receipt email sent: Tower email |
| 07/15/2016 | Modification Received |

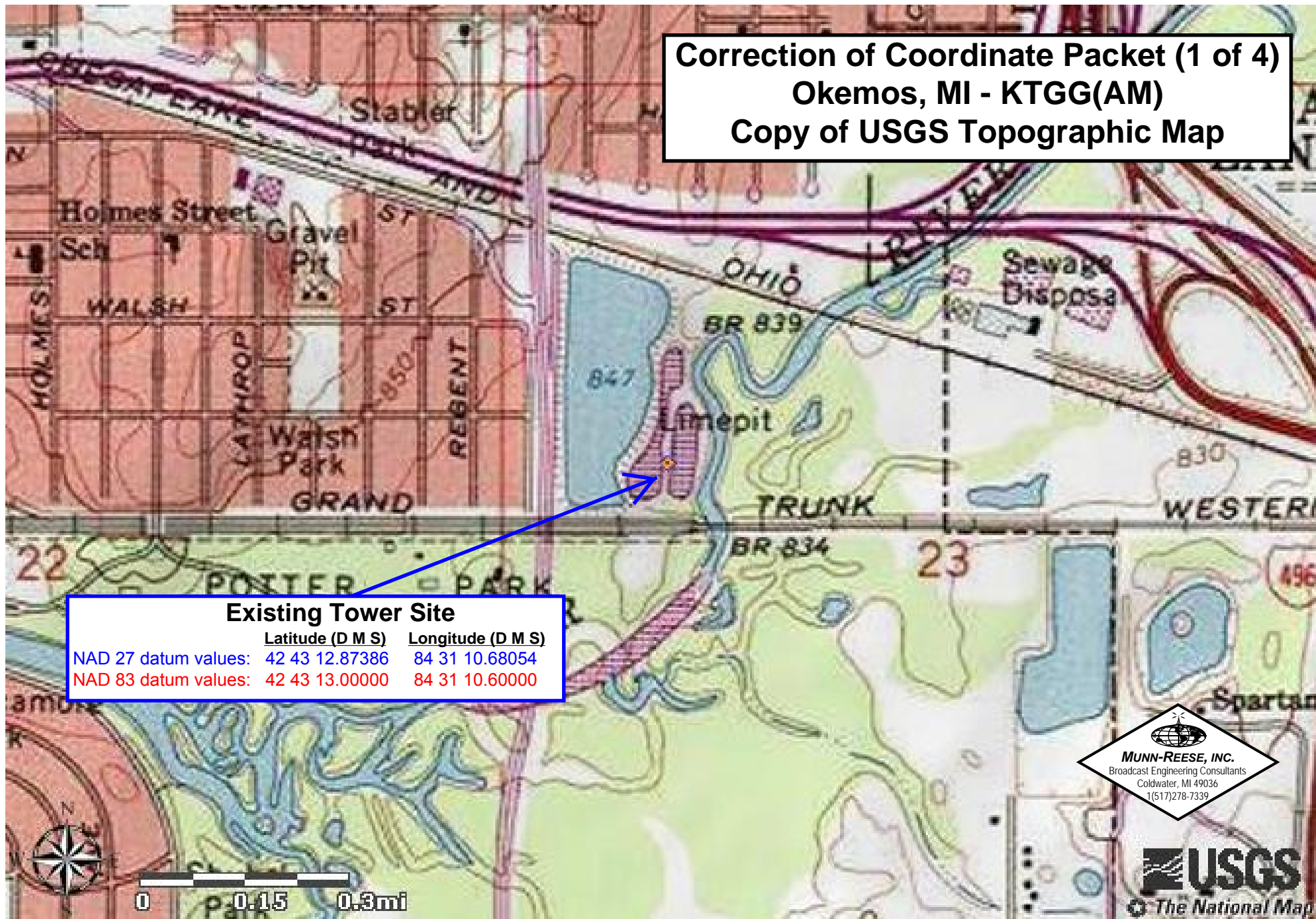
All History (31)

Automated Letters

| | |
|------------|--------------------------|
| 07/16/2016 | Authorization, Reference |
| 06/03/2016 | Authorization, Reference |
| 03/19/2014 | Authorization, Reference |

All letters (14)

Correction of Coordinate Packet (1 of 4)
Okemos, MI - KTGG(AM)
Copy of USGS Topographic Map



Existing Tower Site

| | Latitude (D M S) | Longitude (D M S) |
|----------------------|------------------|-------------------|
| NAD 27 datum values: | 42 43 12.87386 | 84 31 10.68054 |
| NAD 83 datum values: | 42 43 13.00000 | 84 31 10.60000 |

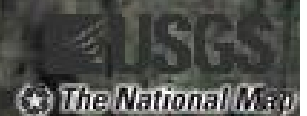
Correction of Coordinate Packet (1 of 4)
Okemos, MI - KTGG(AM)
Copy of USGS Aerial Photograph

Existing Tower Site

| | <u>Latitude (D M S)</u> | <u>Longitude (D M S)</u> |
|----------------------|-------------------------|--------------------------|
| NAD 27 datum values: | 42 43 12.87386 | 84 31 10.68054 |
| NAD 83 datum values: | 42 43 13.00000 | 84 31 10.60000 |



0 100 200ft



Correction of Coordinate Packet (1 of 4)

Okemos, MI - KTGG(AM)

Vertical Plan of Antenna System

THE SITE IS LOCATED AT 2150 EAST MAIN STREET;
THE CITY OF LANSING; INGHAM COUNTY; THE STATE OF MICHIGAN.

Antenna Structure Registration No.

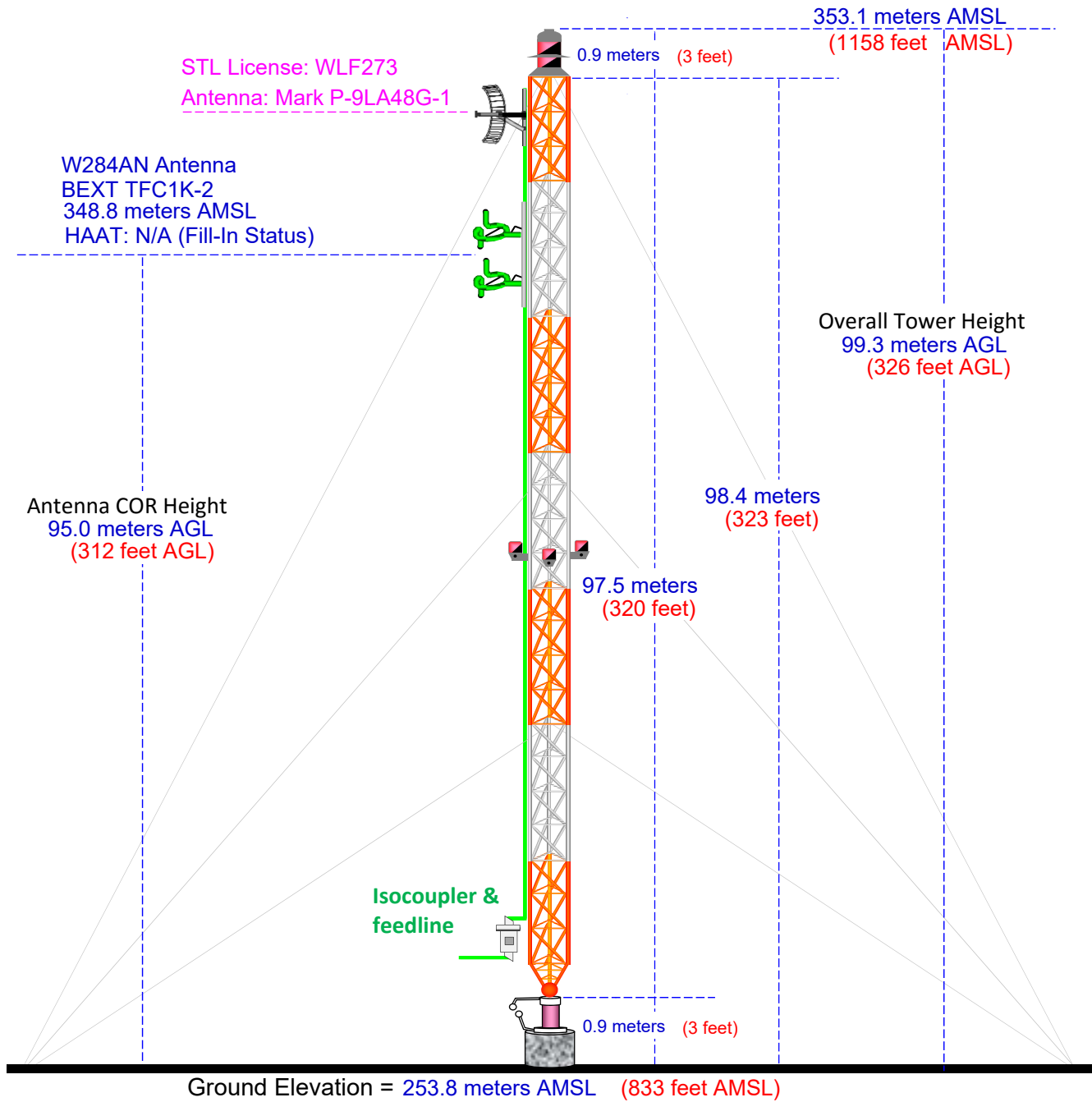
1055176

Latitude (D M S)

Longitude (D M S)

NAD 27 datum values: 42 43 12.87386 84 31 10.68054

NAD 83 datum values: 42 43 13.00000 84 31 10.60000



Ground Elevation = 253.8 meters AMSL (833 feet AMSL)

Drawing is not to Scale

Munn-Reese, Inc.

Broadcast Engineering Consultants
Coldwater, MI 49036