

FOR
FCC
USE
ONLY

FOR COMMISSION USE ONLY
FILE NO.

FCC 301

APPLICATION FOR CONSTRUCTION PERMIT FOR COMMERCIAL BROADCAST STATION

Section I - General Information

1. Legal Name of the Applicant
Tribune Media Company

Mailing Address
435 E. John Carpenter Freeway, Suite 700

City Irving	State or Country (if foreign address) Texas	ZIP Code 75062
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Telephone Number (include area code) 972-373-8000	E-Mail Address (if available) jasroberts@nexstar.tv
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FCC Registration Number 0005-0471-05	Call Sign WGN(AM)	Facility ID Number 72114
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2. Contact Representative (if other than applicant) Firm or Company Name

Mailing Address

City	State or Country (if foreign address)	ZIP Code
------	---------------------------------------	----------

Telephone Number (include area code)	E-Mail Address (if available)
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3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):

Governmental Entity Other _____

4. Application Purpose.

- | | |
|--|--|
| <input type="checkbox"/> New Station | <input type="checkbox"/> Major Modification of construction permit |
| <input type="checkbox"/> New Station with Petition for Rulemaking or Counterproposal to Amend FM Table of Allotments | <input type="checkbox"/> Minor Modification of construction permit |
| <input type="checkbox"/> New Station with Petition for Rulemaking or Counterproposal to Amend FM Table of Allotments using Tribal Priority | <input type="checkbox"/> Major Amendment to pending application |
| <input type="checkbox"/> Major Change in licensed facility | <input type="checkbox"/> Minor Amendment to pending application |

Minor Change in licensed facility

a. File number of original construction permit: BL-9368

N/A

b. Service Type: AM FM TV DTV DTS

c. DTV Type: Pre-Transition Post-Transition Both

d. Community of License:

City Chicago	State IL
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e. Facility Type: Main Auxiliary

If an amendment, submit as an Exhibit a listing by Section and Question Number of the portions of the pending application that are being revised.

Exhibit No.

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

Section II - Legal

1. **Certification.** Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.

2. **Parties to the Application.**

- a. List the applicant, and, if other than a natural person, its officers, directors, stockholders and other entities with attributable interests, non-insulated partners and/or members. If a corporation or partnership holds an attributable interest in the applicant, list separately its officers, directors, stockholders and other entities with attributable interests, non-insulated partners and/or members. Create a separate row for each individual or entity. Attach additional pages if necessary.

(1) Name and address of the applicant and each party to the application holding an attributable interest (if other than individual also show name, address and citizenship of natural person authorized to vote the stock or holding the attributable interest). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and other entities with attributable interests, and partners.

(2) Citizenship.
(3) Positional Interest: Officer, director, general partner, limited partner, LLC member, investor/creditor attributable under the Commission's equity/debt plus standard, etc.

(4) Percentage of votes.
(5) Percentage of total assets (equity plus debt).

(1)	(2)	(3)	(4)	(5)

- b. Applicant certifies that equity and financial interests not set forth above are non-attributable.

Yes No See Explanation in Exhibit No.
 N/A

3. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest.

Exhibit No. N/A

4. **Multiple Ownership.**

- a. Is the applicant or any party to the application the holder of an attributable radio joint sales agreement or an attributable radio or television time brokerage agreement in the same market as the station subject to this application?

Yes No

If "YES," radio applicants must submit as an Exhibit a copy of each such agreement for radio stations.

Exhibit No.

Section II - Legal

- b. Applicant certifies that the proposed facility complies with the Commission's multiple ownership rules.

Yes No

Radio applicants only: If "Yes," submit an Exhibit providing information regarding the market, broadcast station(s), and other information necessary to demonstrate compliance with 47 C.F.R. Section 73.3555(a).

See Explanation
in Exhibit No.
1

All Applicants: If "No," submit as an Exhibit a detailed explanation in support of an exemption from, or waiver of, 47 C.F.R. Section 73.3555.

- c. Applicant certifies that the proposed facility:

- (1) does not present an issue under the Commission's policies relating to media interests of immediate family members;
- (2) complies with the Commission's policies relating to future ownership interests; and
- (3) complies with the Commission's restrictions relating to the insulation and non-participation of non-party investors and creditors.

Yes No

See Explanation
in Exhibit No.

- d. Does the Applicant claim status as an "eligible entity," that is, an entity that qualifies as a small business under the Small Business Administration's size standards for its industry grouping (as set forth in 13 C.F.R. Section 121.201), and holds:

- (1) 30 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet; or
- (2) 15 percent or more of the stock or partnership interests and more than 50 percent of the voting power of the corporation or partnership that will own the media outlet, provided that no other person or entity owns or controls more than 25 percent of the outstanding stock or partnership interests; or
- (3) more than 50 percent of the voting power of the corporation that will own the media outlet (if such corporation is a publicly traded company)?

Yes No

See Explanation
in Exhibit No.

All applicants: If "Yes," submit as an Exhibit a detailed showing demonstrating proof of status as an eligible entity.

5. **Character Issues.** Applicant certifies that neither applicant nor any party to the application

- a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or
- b. any pending broadcast application in which character issues have been raised.

Yes No

See Explanation
in Exhibit No.

6. **Adverse Findings.** Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.

Yes No

See Explanation
in Exhibit No.

7. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.

Yes No

See Explanation
in Exhibit No.

8. **Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a Commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.

Yes No

9. **Local Public Notice.** Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.

Yes No

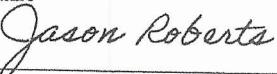
10. **Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. Yes No N/A

An exhibit is required unless this question is inapplicable.

Exhibit No. _____
11. **Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862. Yes No
12. **Equal Employment Opportunity (EEO).** If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A. Yes No N/A
13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the FM Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter-proponent will apply to participate in the auction of the channel allotment requested and specified in this application. Yes No N/A
14. **Tribal Priority - Threshold Qualifications.** Is the Applicant applying for an FM allotment set forth in a Public Notice announcing a Tribal Threshold Qualifications window? An Applicant answering "Yes" must provide an Exhibit demonstrating that it would have been qualified to add the allotment for which it is applying using the Tribal Priority. Yes No

Exhibit No. _____

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing Jason Roberts	Typed or Printed Title of Person Signing Associate General Counsel
Signature 	Date 10/17/22

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Cynthia M. Jacobson, P.E.	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 	Date 10/11/22	
Mailing Address Carl T. Jones Corporation, 7901 Yarnwood Ct.		
City Springfield	State or Country (if foreign address) VA	ZIP Code 22153
Telephone Number (include area code) 703-569-7704	E-Mail Address (if available) cjacob@ctjc.com	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

SECTION III - A AM Engineering

TECHNICAL SPECIFICATIONS Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Frequency: 720 kHz
2. Class: A B C D
3. Hours of Operation: Unlimited Limited Daytime Share Time Specified Hours: _____
4. Daytime Operation: Yes No

- a. Power: 50.0 kW

- b. Antenna Location Coordinates: (NAD 27)

<u>42</u>	°	<u>00</u>	'	<u>38</u>	"	<input checked="" type="checkbox"/> N <input type="checkbox"/> S Latitude
<u>88</u>	°	<u>02</u>	'	<u>00</u>	"	<input type="checkbox"/> E <input checked="" type="checkbox"/> W Longitude

- c. Nondirectional:

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No. _____

Theoretical 290.1 mV/m per kW at 1 km

Tower	1						
Overall height above ground (include obstruction lighting) (meters)	78.9						
Antenna structure registration	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: right; padding-right: 5px;"><input checked="" type="checkbox"/></td> <td style="width: 80px; text-align: left;">Number _____</td> </tr> <tr> <td style="text-align: right; padding-right: 5px;"><input type="checkbox"/></td> <td style="text-align: left;">Notification filed with FAA</td> </tr> <tr> <td style="text-align: right; padding-right: 5px;"><input type="checkbox"/></td> <td style="text-align: left;">Not applicable</td> </tr> </table>	<input checked="" type="checkbox"/>	Number _____	<input type="checkbox"/>	Notification filed with FAA	<input type="checkbox"/>	Not applicable
<input checked="" type="checkbox"/>	Number _____						
<input type="checkbox"/>	Notification filed with FAA						
<input type="checkbox"/>	Not applicable						
Height of radiator above base insulator, or above base, if grounded (meters)	76.2						
Electrical height of radiator (degrees)	65.9						
Top-Loaded/Sectionalized apparent height (degrees)							
A							
B							
C							
D							

TECH BOX - DAYTIME OPERATION

d. Directional:

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Yes No

Exhibit No. _____

Theoretical _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	<input type="checkbox"/> Number <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<input type="checkbox"/> Number <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<input type="checkbox"/> Number <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable	<input type="checkbox"/> Number <input type="checkbox"/> Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

Augmented:

Yes No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth	Span	Augmentation radiation (mV/m at 1 km)
---------	------	--

TECH BOX - NIGHTTIME OPERATION

5. Nighttime Operation:

 Yes Noa. Power: 50.0 kW

b. Antenna Location Coordinates: (NAD 27)

<u>42</u>	<u>00</u>	<u>38</u>	<input checked="" type="checkbox"/> N	<input type="checkbox"/> S Latitude
<u>88</u>	<u>02</u>	<u>00</u>	<input type="checkbox"/> E	<input checked="" type="checkbox"/> W Longitude

c. Nondirectional:

 Yes No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical 290.1 mV/m per kW at 1 km

Tower	1						
Overall height above ground (include obstruction lighting) (meters)	78.9						
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<input checked="" type="checkbox"/>	Number _____						
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Height of radiator above base insulator, or above base, if grounded (meters)	76.2						
Electrical height of radiator (degrees)	65.9						
Top-Loaded/Sectionalized apparent height (degrees)							
A							
B							
C							
D							

TECH BOX - NIGHTTIME OPERATION

d. Directional:

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Yes No

Exhibit No. _____

Theoretical _____ mV/m at 1 kin

Standard RMS: _____ mV/rn at 1 kin

Towers	1	2	3	4												
Overall height above ground (include obstruction lighting) (meters)																
Antenna structure registration	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center; padding-bottom: 5px;">Number</td> <td style="width: 25%; text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Notification filed with FAA</td> <td style="width: 25%; text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Number</td> <td style="width: 25%; text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Notification filed with FAA</td> </tr> <tr> <td style="text-align: center; padding-bottom: 5px;">Not applicable</td> <td style="text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Not applicable</td> <td style="text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Number</td> <td style="text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Notification filed with FAA</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Not applicable</td> <td style="text-align: center; padding-bottom: 5px;"><input type="checkbox"/> Not applicable</td> </tr> </table>	Number	<input type="checkbox"/> Notification filed with FAA	<input type="checkbox"/> Number	<input type="checkbox"/> Notification filed with FAA	Not applicable	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Number	<input type="checkbox"/> Notification filed with FAA			<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable			
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		<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable													
Height of radiator above base insulator, or above base, if grounded (meters)																
Electrical height of radiator (degrees)																
Field ratio																
Phase (degrees)																
Spacing (degrees)																
Tower orientation (degrees)																
Tower reference switch																
Top-Loaded/Sectionalized apparent height (degrees)																
A																
B																
C																
D																

Augmented:

Yes No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km
 Azimuth Span Augmentation radiation

TECH BOX - CRITICAL HOURS OPERATION

6. Critical Hours Operation:

Yes No

a. Power: _____ kW

b. Antenna Location Coordinates: (NAD 27)

_____ ° _____ ' _____ " N S Latitude
_____ ° _____ ' _____ " E W Longitude

c. Nondirectional:

Yes No

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Exhibit No.

Theoretical _____ mV/m per kW at 1 km

Tower	
Overall height above ground (include obstruction lighting) (meters)	
Antenna structure registration	<p>Number _____</p> <p><input type="checkbox"/> Notification filed with FAA</p> <p><input type="checkbox"/> Not applicable</p>
Height of radiator above base insulator, or above base, if grounded (meters)	
Electrical height of radiator (degrees)	
Top-Loaded/Sectionalized apparent height (meters)	
A	
B	
C	
D	

TECH BOX - CRITICAL HOURS OPERATION

d. Directional:

If "Yes," complete the following items. If additional space is needed, please provide the information requested below in an Exhibit.

Yes No

Exhibit No.

Theoretical _____ mV/m at 1 km

Standard RMS: _____ mV/m at 1 km

Towers	1	2	3	4
Overall height above ground (include obstruction lighting) (meters)				
Antenna structure registration	<input type="checkbox"/> Number Notification filed with FAA <input type="checkbox"/> Not applicable	<input type="checkbox"/> Number Notification filed with FAA <input type="checkbox"/> Not applicable	<input type="checkbox"/> Number Notification filed with FAA <input type="checkbox"/> Not applicable	<input type="checkbox"/> Number Notification filed with FAA <input type="checkbox"/> Not applicable
Height of radiator above base insulator, or above base, if grounded (meters)				
Electrical height of radiator (degrees)				
Field ratio				
Phase (degrees)				
Spacing (degrees)				
Tower orientation (degrees)				
Tower reference switch				
Top-Loaded/Sectionalized apparent height (degrees)				
A				
B				
C				
D				

Augmented:

Yes No

If "Yes," complete the following:

Augmented RMS: _____ mV/m at 1 km

Azimuth Span Augmentation radiation

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

7. **Broadcast Facility.** The proposed facility complies with the engineering standards and assignment requirements of 47 C.F.R. Sections 73.24(e), 73.24(g), 73.33, 73.45, 73.150, 73.152, 73.160, 73.182(a)-(i), 73.186, 73.189, 73.1650. **Exhibit Required.**
- Yes No See Explanation in Exhibit No.
- Exhibit No.
Eng. Pkt.
8. **Community Coverage.** The proposed facility complies with community coverage requirements of 47 C.F.R. Section 73.24(i).
- Yes No See Explanation in Exhibit No.
9. **Main Studio Location.** The proposed main studio location complies with requirements of 47 C.F.R. Section 73.1125.
- Yes No See Explanation in Exhibit No.
10. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all those that apply. An exhibit is required for each applicable section.
- Groundwave.**
 a. 47 C.F.R. Section 73.37
- Skywave.**
 b. 47 C.F.R. Section 73.182.
- Critical Hours.**
 c. 47 C.F.R. Section 73.187.
- Yes No See Explanation in Exhibit No.
- Exhibit No.
See Fig 2 in Pkt
- Exhibit No.
See Fig 4 in Pkt
- Exhibit No.
11. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radio frequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an **Exhibit is required**.
- By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radio frequency electromagnetic exposure in excess of FCC guidelines.
- Yes No See Explanation in Exhibit No.
- See Eng. Stmt.
12. **Community of License Change - Section 307(b).** If the application is being submitted to change the facility's community of license, then the applicant certifies that it has attached an exhibit containing information demonstrating that the proposed community of license change constitutes a preferential arrangement of assignments under Section 307(b) of the Communications Act of 1934, as amended (47 U.S.C. Section 307(b)).
- Yes No N/A
- Exhibit No.
- An exhibit is required unless this question is not applicable.
13. **Dispositive Section 307(b) Preference**
- a. Was the AM facility that is the subject of this application awarded on the basis of a dispositive Section 307(b) preference?
- Yes No
- b. If yes to 13(a), applicant certifies that: (i) the community of license proposed in the subject application is the same as that on which the Section 307(b) preference was based, or (ii) as shown in the attached Exhibit, the service area proposed in the subject application is substantially equivalent to the service area on which the Section 307(b) preference was based.
- Yes No N/A
- Exhibit No.
- c. If yes to 13(a) and no to 13(b), applicant certifies that, although in the subject application it proposes to: (i) change the community of license, or (ii) modify service to the area on which the Section 307(b) preference was based, it has for a period of four years of on-air operations: (1) served the community of license, or (2) provided full service to the area on which the Section 307(b) preference was based.
- Yes No
- Exhibit No.

Tribune Media Company
FCC Form 301
Exhibit 1

Multiple Ownership Exhibit

Tribune Media Company is wholly owned by Nexstar Media Inc. ("Nexstar"). The only radio station licensed to the Chicago, Illinois BIA that is owned and/or attributable to Nexstar or its wholly owned subsidiaries is WGN(AM), Chicago, Illinois. Therefore, Nexstar and Tribune are in compliance with the FCC's multiple ownership rules as set forth under 47 CFR § 73.3555.

**ENGINEERING EXHIBIT
IN SUPPORT OF AN
APPLICATION FOR CONSTRUCTION PERMIT
FOR AN AUXILIARY ANTENNA
WGN – CHICAGO, ILLINOIS
720 kHz – 50.0 kW DAY/50.0 kW NIGHT - ND-1
FACILITY ID: 72114**

Applicant: Tribune Media Company

October, 2022



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FCC Form 301 - Section III

ENGINEERING STATEMENT OF CYNTHIA M. JACOBSON, P.E.

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Present and Proposed Nighttime Interference-Free Service Contours	3
Nighttime Allocation Study	4





ENGINEERING STATEMENT OF CYNTHIA M. JACOBSON, P.E.
IN SUPPORT OF AN
APPLICATION FOR CONSTRUCTION PERMIT
FOR AN AUXILIARY ANTENNA
WGN – CHICAGO, ILLINOIS
720 kHz – 50.0 kW DAY/50.0 kW NIGHT – ND-1
Facility ID: 72114

Applicant: Tribune Media Company

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Registered Professional Engineer in the Commonwealth of Virginia, Registration No. 0402027914.

GENERAL

This office has been authorized by Tribune Media Company ("Tribune"), licensee of Standard Broadcast Station WGN, Chicago, Illinois, to prepare this Engineering Statement, FCC Form 301 (Section III), and the attached figures in support of an Application for Construction Permit to construct a new auxiliary nondirectional antenna to replace the older, licensed auxiliary nondirectional antenna. The proposed auxiliary antenna will be employed when the main facility is off the air during emergencies or for maintenance.

STATEMENT OF CYNTHIA M. JACOBSON, P.E.
WGN – CHICAGO, ILLINOIS
Page 2

WGN is a Class A station, presently licensed to operate on 720 kHz with a power of 50.0 kW using a nondirectional antenna for the day and night operations (ND-1).

The instant application proposes to operate with an auxiliary new nondirectional antenna at a daytime and nighttime power of 50.0 kW. The current auxiliary tower will be dismantled and a new tower will be constructed 0.132 kilometers immediately north, northwest of the current tower on the same parcel of land.

ANTENNA SYSTEM AND GROUND SYSTEM

The proposed WGN nondirectional antenna will be a tapered self-supporting, series fed tower, 65.9 electrical degrees in height, corresponding to a radiator height of 76.2 meters.

The ground system will consist of 120 evenly spaced, buried, copper wire radials about the base of the tower. The radials for the proposed auxiliary antenna will be 76.2 meters (0.183λ) in length. In addition, a 14.6 meter by 14.6 meter square copper ground screen will be installed at the base of the auxiliary tower.

The auxiliary tower will be close enough to the new proposed main tower to result in overlap of the two ground systems. At the intersection of the main and auxiliary ground system radials, a copper transverse strap will be used to terminate the intersecting radials where they will be soldered to the transverse strap. The auxiliary and main antenna ground systems will be electrically bonded together, thus substantially increasing the effective size of the auxiliary ground system. For this

STATEMENT OF CYNTHIA M. JACOBSON, P.E.
WGN – CHICAGO, ILLINOIS
Page 3

reason, it is believed that no efficiency reduction is necessary for the auxiliary antenna system.

FAA NOTIFICATION AND TOWER REGISTRATION

The overall height of the proposed auxiliary antenna structure will be 78.9 meters AGL (293.5 meters AMSL). The proposed auxiliary antenna structure will replace the current antenna structure that was constructed in 1952. The proposed new tower will be 2.5 meters taller AGL and 2.1 meters taller AMSL than the current tower as registered, ASR #1007547. See Figure 1 for the details of the associated heights.

A Notice of Proposed Construction, FAA Form 7460-1 was filed with the Federal Aviation Administration (FAA). The assigned Aeronautical Study No. is 2022-AGL-17510-OE. Following the FAA's issuance of a "Determination of No Hazard", the FCC tower registration will be modified to reflect the slight change in coordinates and associated tower heights.

SITE AND SURROUNDING TERRAIN

The proposed antenna/transmitter location and surrounding terrain characteristics are on file with the FCC and the FAA. The tower coordinates (NAD-27) for the proposed WGN auxiliary nondirectional operation are:

North Latitude: 42° - 00' – 38"
West Longitude: 88° - 02' – 00"

COVERAGE CONTOURS

The predicted 0.5 mV/m daytime coverage contours for the licensed main facility and the proposed auxiliary facility are shown on the map of Figure 2. As shown, the proposed auxiliary 0.5 mV/m daytime contour is predicted to be entirely within the licensed main 0.5 mV/m daytime contour as required by 73.1675(a)(1) of the Rules.

The map of Figure 3 illustrates that the nighttime interference-free (“NIF”) contour of the proposed auxiliary facility is wholly encompassed within the NIF of the current licensed main nighttime facility.

Field strength contours were calculated using the “equivalent distance” method for paths consisting of more than one conductivity. Conductivity data employed in the calculation of field strength contours were obtained from FCC Figure M-3 soil map.

NIGHTTIME ALLOCATION STUDY

Due to the reduction in height of the auxiliary antenna when compared to the main licensed facility, a nighttime allocation study is attached as Figure 4. Figure 4 contains a tabulation of the proposed RSS calculations for co-channel and first adjacent domestic stations and for co-channel foreign stations that may be impacted by the proposed auxiliary operation of WGN. The proposed auxiliary operation of WGN will not raise the 50% or the 25% RSS limit of any domestic station or the 50% RSS limit of any foreign station.

There are several Region 2 Class A stations on the frequency of 720 kHz. These

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stations are UNK, Simutaq, GL; YSR, San Salvador, ES; and TGRO, Corona, GT. Figure 4 indicates that proposal will result in a positive margin towards all three of the above referenced stations. In all instances, the 1.25 mV/m – 50% skywave and/or 1.25 mV/m nighttime groundwave contours of all three stations are protected by the 0.0625 mV/m – 10% skywave contour of proposed WGN auxiliary operation. In cases where the protected contour extends beyond the boundary of the protected station's country, the signal at the border of the country then becomes the protected value at a 20:1 D/U ratio.

Figure 4 also indicates a margin of greater than 500 mV/m in the protection of the 0.5 mV/m nighttime groundwave contour of first-adjacent Class A station WOR – 710 kHz, New York, New York by the 0.25 mV/m – 10% skywave contour and/or the 0.25 mV/m nighttime contour of the proposed WGN auxiliary operation. In areas where current overlap exists, the proposed WGN auxiliary facility will not extend the proposed interfering contour beyond the present licensed main interfering contour.

ENVIRONMENTAL IMPACT

The proposal described herein meets the criteria specified in Section 1.1306 of the Commission's Rules as an action which is categorically excluded from environmental processing. The proposal does not involve a site location specified under Section 1.1307(a)(1)-(7) of the Rules, nor high intensity lighting as specified under Section 1.1307(a)(8).

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RADIO-FREQUENCY IMPACT

On January 1, 1986, the FCC amended its Rules to implement the National Environmental Policy Act of 1969 (NEPA). This amendment established RF radiation protection guidelines to be used to determine if potentially harmful RF exposure is possible from an FCC-regulated transmission facility. Effective October 15, 1997, the FCC adopted revised guidelines and procedures for evaluating environmental effects of RF emissions. These revised guidelines incorporate two tiers of exposure limits based on whether exposure occurs in a “controlled” (occupational) situation or an “uncontrolled” (general population) situation. The FCC has also revised OET Bulletin No. 65 entitled, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields,” to aid the radiation exposure analysis. This bulletin, as well as other current literature, provides detailed information for conducting an analysis including mathematical equations that can be used to determine compliance with the Commission’s guidelines.

CALCULATION METHODS

Verification of compliance with FCC specified guidelines for human exposure to RF radiation was obtained from OET Bulletin No. 65.

The proposed WGN auxiliary facility will operate on 720 kHz with a daytime and nighttime power level of 50.0 kW. To determine the required minimum restricted distance around the base of the auxiliary tower, Tables 1 and 2 of Supplement A

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(Edition 97-01) to OET Bulletin 65 were used. Interpolating between the two tables for a radiating element of 0.182 wavelength, a fence of no less than 8.02 meters from the base of the tower would be compliant with the radio-frequency energy requirements of the FCC regarding the general population/uncontrolled MPE limits.

It is proposed to install a fence around the base of the auxiliary tower that meets the minimum distance requirement above and therefore it is submitted that the proposed WGN auxiliary station will not constitute a potential hazard to the quality of the human environment. Accordingly, the WGN proposal for the auxiliary operation, as described herein, should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

OCCUPATIONAL SAFETY

Access to the area immediately surrounding the auxiliary WGN supporting tower base will be restricted to authorize maintenance personnel only. Procedures such as: operation from the auxiliary antenna or reduced power operation will be followed during times of service or maintenance on the tower or around the base of the tower to prevent exposure to field levels that exceed the FCC's MPE limits.

CONCLUSION

This statement and Section III of FCC Form 301 and the attached figures were prepared by me or under my direct supervision and are believed to be true and correct.

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It is submitted that the proposed operation described herein complies with the technical standards of the Rules and Regulations of the Commission.

DATED: October 11, 2022



FIGURE 1

Self supporting tower

COORDINATES NAD-27

NORTH LATITUDE: $42^{\circ} 00' 38''$
WEST LONGITUDE: $88^{\circ} 02' 00''$

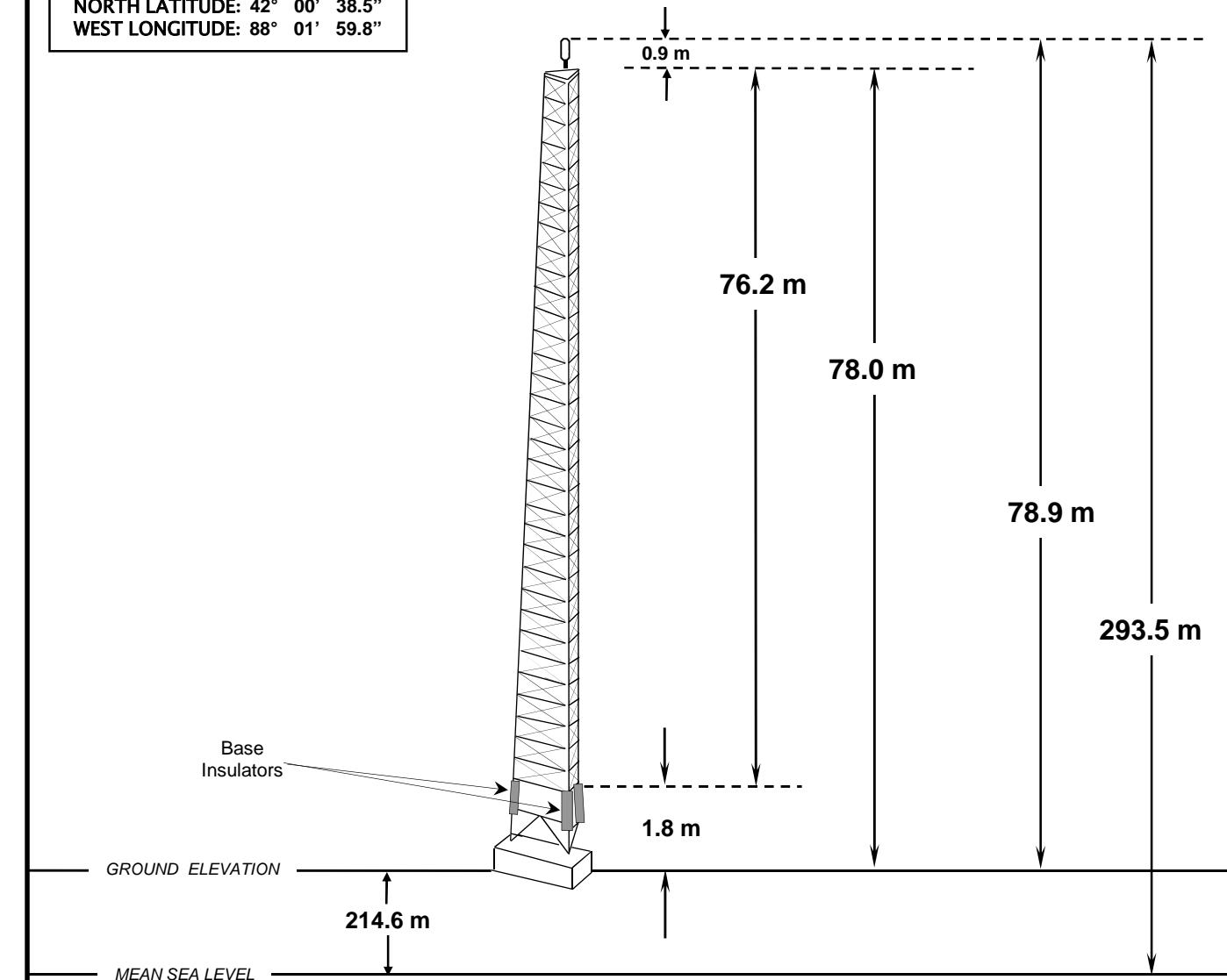
COORDINATES NAD-83

NORTH LATITUDE: $42^{\circ} 00' 38.5''$
WEST LONGITUDE: $88^{\circ} 01' 59.8''$

Base
Insulators

GROUND ELEVATION

MEAN SEA LEVEL



**VERTICAL PLAN ANTENNA SKETCH
FOR AUXILIARY OPERATION**

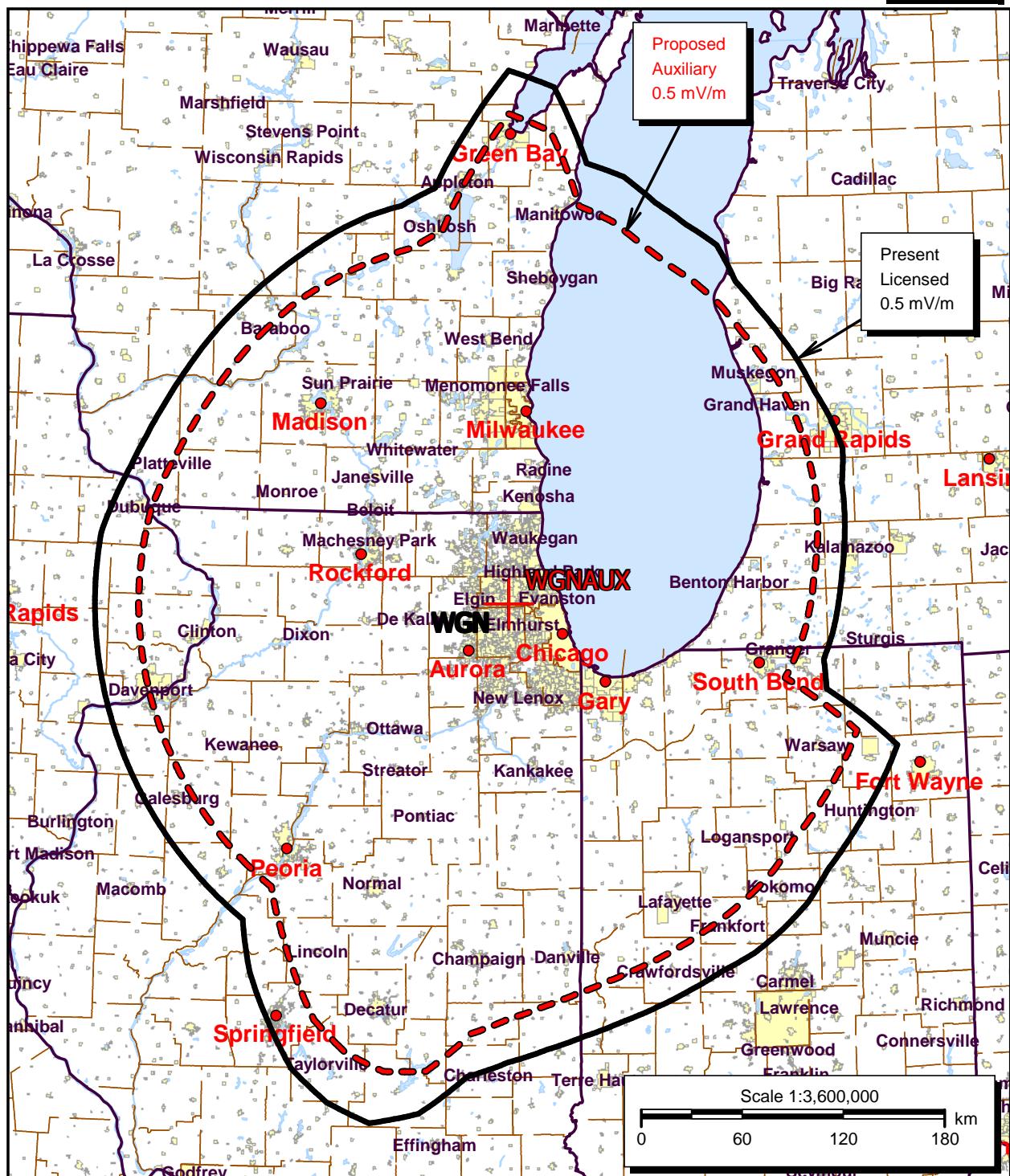
WGN - CHICAGO, ILLINOIS

720 kHz – 50.0 KW DAY/50.0 KW NIGHT – ND-1
OCTOBER, 2022



NOT DRAWN TO SCALE

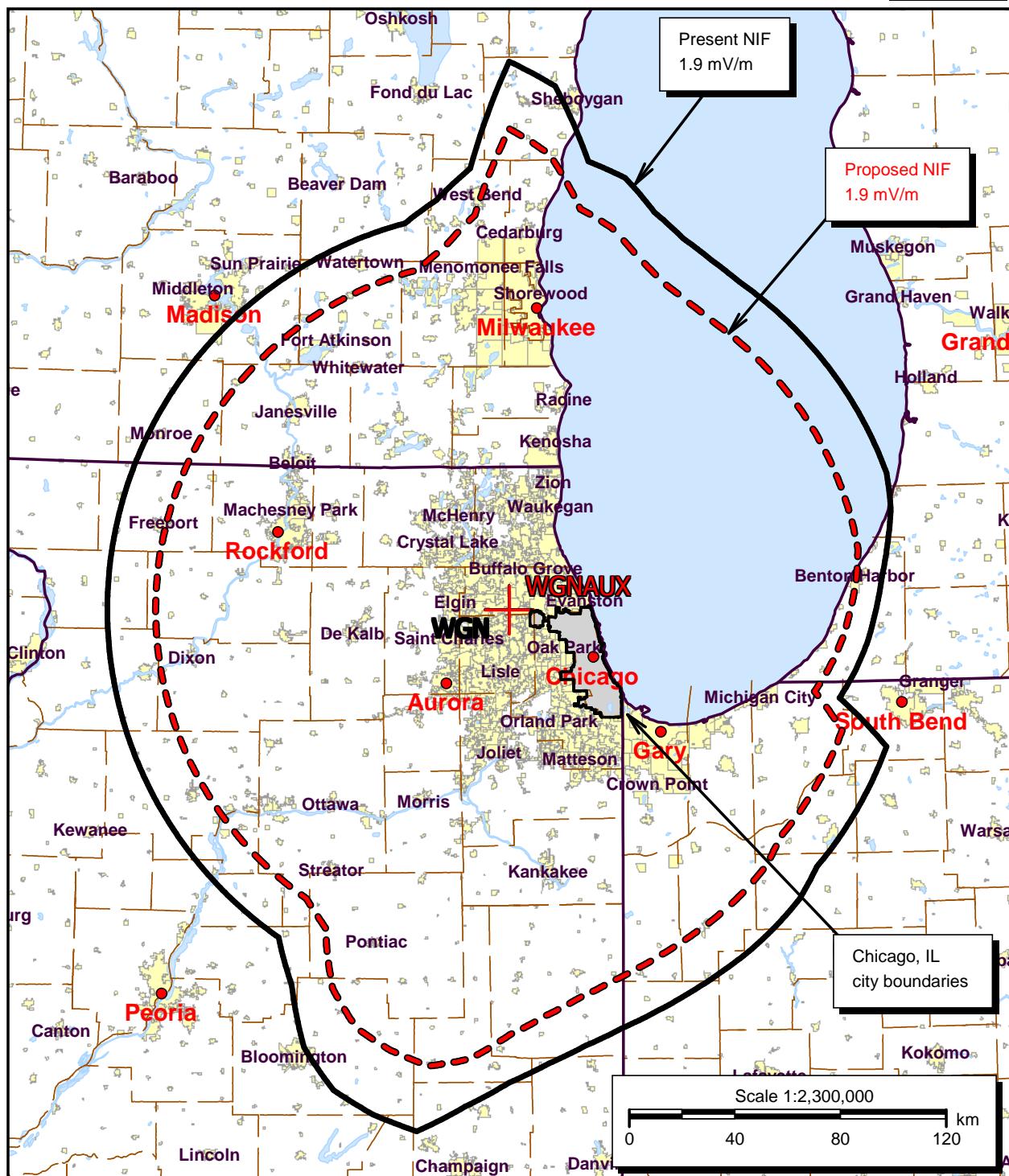
FIGURE 2



PRESENT LICENSED AND PROPOSED AUXILIARY
0.5 MV/M DAYTIME CONTOURS
WGN - CHICAGO, ILLINOIS
720 KHZ - 50.0 KW DAY/50.0 KW NIGHT - ND-1
OCTOBER, 2022



FIGURE 3



PRESENT LICENSED AND PROPOSED AUXILIARY
NIGHTTIME INTERFERENCE-FREE CONTOURS
WGN - CHICAGO, ILLINOIS
720 KHZ - 50.0 KW DAY/50.0 KW NIGHT - ND-1
OCTOBER, 2022



Night Allocation Protection Report

Call: WGN AUXILIARY
 Freq: 720 kHz
 CHICAGO, IL, US
 Hours: U
 Lat: 42-00-38 N [NAD27]
 Lng: 088-02-00 W
 Power: 50.0 kW
 Theo RMS: 290.1 mV/m @ 1km @ 1kW

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	65.9	0	0	0.0	0.0	0.0	0.0

Call Letters	Ct St City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
WDSM	US WI SUPERIOR	72.84	3.743	2569.41	1997.26	572.14
50% = 11.438, 25% = 12.789; KCMO=11.44 KNUS=4.33 WGN=3.74						
KCMO	US MO KANSAS CITY	81.16	4.192	2582.46	1999.93	582.52
50% = 5.39, 25% = 6.181; WGN=4.19 WOR=3.39 WLW=2.53 KEEL=1.66						
WOR (0)	US NY NEW YORK	26.17	0.500	2812.74E	2043.59	769.16
WOR (5)	US NY NEW YORK	25.65	0.500	2814.62E	2043.93	770.69
WOR (10)	US NY NEW YORK	25.09	0.500	2816.46E	2044.26	772.20
WOR (15)	US NY NEW YORK	24.51	0.500	2818.25E	2044.59	773.66
WOR (20)	US NY NEW YORK	23.93	0.500	2820.01E	2044.91	775.10
WOR (25)	US NY NEW YORK	23.98	0.500	2820.00E	2044.91	775.09
WOR (30)	US NY NEW YORK	23.84	0.500	2821.70E	2045.22	776.48
WOR (35)	US NY NEW YORK	23.49	0.500	2821.70E	2045.22	776.48
WOR (40)	US NY NEW YORK	23.15	0.500	2823.37E	2045.53	777.84
WOR (45)	US NY NEW YORK	22.89	0.500	2824.99E	2045.82	779.17
WOR (50)	US NY NEW YORK	22.61	0.500	2824.99E	2045.82	779.17
WOR (55)	US NY NEW YORK	22.25	0.500	2826.57E	2046.11	780.46
WOR (60)	US NY NEW YORK	21.64	0.500	2829.62E	2046.67	782.95
WOR (65)	US NY NEW YORK	18.82	0.500	2837.77E	2048.15	789.62
WOR (70)	US NY NEW YORK	16.74	0.500	2843.41E	2049.17	794.24
WOR (75)	US NY NEW YORK	15.28	1.681	5501.02g	2049.85	3451.17
WOR (80)	US NY NEW YORK	20.41	0.500	2833.87E	2047.44	786.42
WOR (85)	US NY NEW YORK	21.26	0.500	2831.07E	2046.93	784.13
WOR (90)	US NY NEW YORK	20.73	0.658	2832.48E	2047.19	785.29
WOR (95)	US NY NEW YORK	21.92	1.370	3125.80g	2046.67	1079.13
WOR (100)	US NY NEW YORK	22.68	2.680	5909.97g	2046.11	3863.86
WOR (105)	US NY NEW YORK	23.18	3.897	8406.37g	2045.82	6360.55

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
WOR (110)	US	NY	NEW YORK	23.57	5.257	11152.17g	2045.82	9106.35
WOR (115)	US	NY	NEW YORK	23.88	5.590	11702.71g	2045.53	9657.18
WOR (120)	US	NY	NEW YORK	24.15	5.766	11939.78g	2045.53	9894.26
WOR (125)	US	NY	NEW YORK	24.38	9.652	19798.35g	2045.22	17753.12
WOR (130)	US	NY	NEW YORK	24.58	22.268	45297.84g	2045.22	43252.62
WOR (135)	US	NY	NEW YORK	24.76	21.423	43258.72g	2044.91	41213.81
WOR (140)	US	NY	NEW YORK	24.93	16.201	32494.69g	2044.91	30449.78
WOR (145)	US	NY	NEW YORK	25.08	12.811	25534.91g	2044.91	23490.00
WOR (150)	US	NY	NEW YORK	25.23	13.822	27386.55g	2044.91	25341.64
WOR (155)	US	NY	NEW YORK	25.23	13.886	27522.93g	2044.91	25478.02
WOR (160)	US	NY	NEW YORK	25.08	12.687	25293.58g	2044.91	23248.67
WOR (165)	US	NY	NEW YORK	25.14	20.706	41187.90g	2044.91	39142.99
WOR (170)	US	NY	NEW YORK	25.21	10.746	21315.28g	2044.91	19270.37
WOR (175)	US	NY	NEW YORK	25.29	4.666	9223.24g	2045.22	7178.02
WOR (180)	US	NY	NEW YORK	25.66	2.323	4526.23g	2044.91	2481.32
WOR (185)	US	NY	NEW YORK	26.10	0.918	2818.16E	2044.59	773.57
WOR (190)	US	NY	NEW YORK	26.64	0.682	2816.36E	2044.26	772.10
WOR (195)	US	NY	NEW YORK	27.27	0.500	2814.53E	2043.93	770.60
WOR (200)	US	NY	NEW YORK	27.93	0.500	2812.65E	2043.59	769.06
WOR (205)	US	NY	NEW YORK	28.63	0.500	2810.73E	2043.24	767.49
WOR (210)	US	NY	NEW YORK	29.35	0.500	2806.78E	2042.51	764.27
WOR (215)	US	NY	NEW YORK	30.12	0.500	2804.74E	2042.14	762.60
WOR (220)	US	NY	NEW YORK	30.90	0.500	2802.66E	2041.37	761.29
WOR (225)	US	NY	NEW YORK	32.16	0.500	2796.18E	2040.57	755.61
WOR (230)	US	NY	NEW YORK	32.41	0.500	2796.18E	2040.57	755.61
WOR (235)	US	NY	NEW YORK	33.08	0.500	2791.67E	2039.74	751.93
WOR (240)	US	NY	NEW YORK	33.66	0.500	2789.35E	2039.31	750.04
WOR (245)	US	NY	NEW YORK	34.10	0.500	2786.99E	2038.88	748.11
WOR (250)	US	NY	NEW YORK	34.37	0.500	2786.99E	2038.88	748.12
WOR (255)	US	NY	NEW YORK	34.44	0.500	2784.60E	2038.44	746.17
WOR (260)	US	NY	NEW YORK	34.29	0.500	2784.61E	2038.44	746.17
WOR (265)	US	NY	NEW YORK	33.24	0.500	2789.38E	2039.31	750.07
WOR (270)	US	NY	NEW YORK	32.25	0.500	2791.71E	2039.74	751.97
WOR (275)	US	NY	NEW YORK	31.25	0.500	2796.23E	2040.57	755.66
WOR (280)	US	NY	NEW YORK	29.96	0.500	2800.60E	2041.37	759.23
WOR (285)	US	NY	NEW YORK	30.08	0.500	2800.60E	2041.37	759.23
WOR (290)	US	NY	NEW YORK	30.22	0.500	2800.60E	2041.37	759.23
WOR (295)	US	NY	NEW YORK	29.60	0.500	2802.72E	2041.76	760.96
WOR (300)	US	NY	NEW YORK	29.39	0.500	2802.72E	2041.76	760.97
WOR (305)	US	NY	NEW YORK	29.56	0.500	2800.61E	2041.37	759.24
WOR (310)	US	NY	NEW YORK	29.52	0.500	2800.62E	2041.37	759.25
WOR (315)	US	NY	NEW YORK	29.38	0.500	2802.73E	2041.76	760.98
WOR (320)	US	NY	NEW YORK	29.07	0.500	2802.74E	2041.76	760.98
WOR (325)	US	NY	NEW YORK	28.65	0.500	2804.82E	2042.14	762.68
WOR (330)	US	NY	NEW YORK	28.16	0.500	2806.86E	2042.51	764.34
WOR (335)	US	NY	NEW YORK	27.69	0.500	2808.85E	2042.88	765.97
WOR (340)	US	NY	NEW YORK	27.48	0.500	2808.86E	2042.88	765.98
WOR (345)	US	NY	NEW YORK	27.30	0.500	2808.86E	2042.88	765.98

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
WOR (350)	US	NY	NEW YORK	26.94	0.500	2810.82E	2043.24	767.58
WOR (355)	US	NY	NEW YORK	26.60	0.500	2810.82E	2043.24	767.59
KGNC	US	TX	AMARILLO	23.03	1.308	2839.99	2048.37	791.62
	50% = 2.925, 25% = 4.059; WOR=2.48 KIRO=1.55 XERK/A=1.38 WGN=1.31 KURV=1.29							
	KCMO=1.18 KNUS=1.12							
WRZN	US	FL	HERNANDO	20.62	11.745	2848.06	2050.00	798.06
	50% = 11.745, 25% = 11.745; WGN=11.74							
KSAH	US	TX	UNIVERSAL CITY	18.22	10.395	2853.24	2050.84	802.41
	50% = 10.395, 25% = 11.174; WGN=10.39 XEX/A=3.00 KEEL=2.79							
XENVA2/O	MX	TA	MATAMOROS	10.47	5.978	2854.09	2051.01	803.08
	50% = 12.774, 25% = 12.774; KSAH=11.29 WGN=5.98							
NEW MEDICINE HATCA AB MEDICINE HAT				11.27	6.433	2854.23	2050.84	803.39
	50% = 6.433, 25% = 6.733; WGN=6.43 KDWN=1.99							
CHTN/A	CA	PE	CHARLOTTETOWN	9.98	5.697	2854.59	2051.15	803.44
	50% = 6.523, 25% = 6.523; WGN=5.70 UNK-A=3.18							
CHTN/A	CA	PE	CHARLOTTETOWN	9.98	5.697	2854.59	2051.15	803.44
	50% = 6.523, 25% = 6.523; WGN=5.70 UNK-A=3.18							
XENVA2/O	MX	CH	CD.JUAREZ	10.48	5.982	2854.60	2051.01	803.60
	50% = 10.004, 25% = 10.004; KDWN=6.62 WGN=5.98 KSAH=4.52							
YSR-D (0)	ES	SAN SALVADOR		1.69	1.729	5117.76S	2051.39	3066.36
	50% = 3.458, 25% = 3.769; HRNN 3-A=3.46 XEZK/A=1.15 WGN=0.96							
YSR-D (5)	ES	SAN SALVADOR		1.69	1.766	5228.39S	2051.39	3177.00
	50% = 3.531, 25% = 3.83; HRNN 3-A=3.53 XEZK/A=1.12 WGN=0.96							
YSR-D (10)	ES	SAN SALVADOR		1.68	1.831	5437.52S	2051.39	3386.12
	50% = 3.661, 25% = 3.939; HRNN 3-A=3.66 XEZK/A=1.09 WGN=0.96							
YSR-D (15)	ES	SAN SALVADOR		1.67	1.892	5653.40S	2051.39	3602.01
	50% = 3.784, 25% = 3.928; HRNN 3-A=3.78 XEZK/A=1.06							
YSR-D (20)	ES	SAN SALVADOR		1.54	1.945	6300.87P	2051.39	4249.48
	50% = 3.891, 25% = 4.023; HRNN 3-A=3.89 XEZK/A=1.02							
YSR-D (25)	ES	SAN SALVADOR		1.55	2.081	6727.36P	2051.39	4675.96
	50% = 4.161, 25% = 4.161; HRNN 3-A=4.16							
YSR-D (30)	ES	SAN SALVADOR		1.56	0.889	2856.05P	2051.39	804.65
	50% = 1.318, 25% = 1.704; XEZK/A=0.97 WGN=0.89 XECPQ/A=0.61 HCCB4-A=0.53							
	HCJC1-A=0.53 WRZN=0.49							
YSR-D (35)	ES	SAN SALVADOR		1.55	0.884	2856.06P	2051.39	804.67
	50% = 1.295, 25% = 1.696; XEZK/A=0.95 WGN=0.88 XECPQ/A=0.60 HCCB4-A=0.54							
	HCJC1-A=0.54 WRZN=0.50							

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
YSR-D (40)	ES	SAN SALVADOR		1.56	0.894	2856.04S	2051.39	804.64
50% = 1.278, 25% = 1.697; XEZX/A=0.91 WGN=0.89 XECPQ/A=0.60 HCJC1-A=0.55 HCCB4-A=0.55 WRZN=0.53								
YSR-D (45)	ES	SAN SALVADOR		1.53	0.877	2856.06S	2051.39	804.66
50% = 1.249, 25% = 1.682; XEZX/A=0.89 WGN=0.88 XECPQ/A=0.59 HCJC1-A=0.58 HCCB4-A=0.57 WRZN=0.52								
YSR-D (50)	ES	SAN SALVADOR		1.50	0.859	2856.05S	2051.39	804.66
50% = 1.222, 25% = 1.672; XEZX/A=0.87 WGN=0.86 HCJC1-A=0.61 HCCB4-A=0.60 XECPQ/A=0.57 WRZN=0.50								
YSR-D (55)	ES	SAN SALVADOR		1.47	0.840	2856.05S	2051.39	804.66
50% = 1.355, 25% = 1.667; XEZX/A=0.85 WGN=0.84 HCJC1-A=0.64 HCCB4-A=0.63 XECPQ/A=0.55 WRZN=0.49								
YSR-D (60)	ES	SAN SALVADOR		1.44	0.821	2856.05S	2051.39	804.65
50% = 1.348, 25% = 1.664; XEZX/A=0.83 WGN=0.82 HCJC1-A=0.68 HCCB4-A=0.67 XECPQ/A=0.54 WRZN=0.47								
YSR-D (65)	ES	SAN SALVADOR		1.41	2.067	7349.00S	2051.39	5297.60
50% = 4.133, 25% = 4.133; HRNN 3-A=4.13								
YSR-D (70)	ES	SAN SALVADOR		1.37	1.945	7072.59S	2051.39	5021.19
50% = 3.889, 25% = 3.889; HRNN 3-A=3.89								
YSR-D (75)	ES	SAN SALVADOR		1.34	1.879	6993.32S	2051.39	4941.92
50% = 3.758, 25% = 3.758; HRNN 3-A=3.76								
YSR-D (80)	ES	SAN SALVADOR		1.31	1.823	6953.72S	2051.39	4902.33
50% = 3.646, 25% = 3.646; HRNN 3-A=3.65								
YSR-D (85)	ES	SAN SALVADOR		1.28	1.761	6889.08S	2051.39	4837.68
50% = 3.521, 25% = 3.632; HRNN 3-A=3.52 HCJC1-A=0.89								
YSR-D (90)	ES	SAN SALVADOR		1.25	1.724	6920.36S	2051.39	4868.97
50% = 3.448, 25% = 3.695; HRNN 3-A=3.45 HCJC1-A=0.94 HCCB4-A=0.94								
YSR-D (95)	ES	SAN SALVADOR		1.22	1.677	6890.91S	2051.39	4839.52
50% = 3.353, 25% = 3.636; HRNN 3-A=3.35 HCJC1-A=1.00 HCCB4-A=0.99								
YSR-D (100)	ES	SAN SALVADOR		1.19	1.630	6845.02S	2051.39	4793.62
50% = 3.26, 25% = 3.582; HRNN 3-A=3.26 HCCB4-A=1.05 HCJC1-A=1.05								
YSR-D (105)	ES	SAN SALVADOR		1.17	1.589	6813.25S	2051.39	4761.86
50% = 3.177, 25% = 3.542; HRNN 3-A=3.18 HCCB4-A=1.11 HCJC1-A=1.10								
YSR-D (110)	ES	SAN SALVADOR		1.14	1.548	6779.06S	2051.39	4727.67
50% = 3.096, 25% = 3.504; HRNN 3-A=3.10 HCCB4-A=1.17 HCJC1-A=1.15								
YSR-D (115)	ES	SAN SALVADOR		1.12	1.509	6752.26S	2051.39	4700.87
50% = 3.019, 25% = 3.472; HRNN 3-A=3.02 HCCB4-A=1.23 HCJC1-A=1.20								
YSR-D (120)	ES	SAN SALVADOR		1.10	1.470	6711.11S	2051.39	4659.71
50% = 2.94, 25% = 3.438; HRNN 3-A=2.94 HCCB4-A=1.28 HCJC1-A=1.24								
YSR-D (125)	ES	SAN SALVADOR		1.02	1.572	7684.52S	2051.39	5633.13
50% = 3.498, 25% = 3.498; HRNN 3-A=2.68 HCCB4-A=1.61 HCJC1-A=1.57								
YSR-D (130)	ES	SAN SALVADOR		0.98	1.766	9013.95S	2051.39	6962.55
50% = 3.582, 25% = 3.582; HRNN 3-A=2.53 HCCB4-A=1.82 HCJC1-A=1.77								
YSR-D (135)	ES	SAN SALVADOR		0.95	1.806	9455.01S	2051.39	7403.62
50% = 3.611, 25% = 3.611; HRNN 3-A=2.44 HCCB4-A=1.92 HCJC1-A=1.84								
YSR-D (140)	ES	SAN SALVADOR		1.24	15.525	62827.69g	2051.39	60776.30
50% = 3.194, 25% = 3.317; HRNN 3-A=3.19 XEZX/A=0.89								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
YSR-D (145)	ES	SAN SALVADOR	1.24	18.804	75997.29g	2051.39	73945.90	
50% = 3.192, 25% = 3.315; HRNN 3-A=3.19 XEZX/A=0.89								
YSR-D (150)	ES	SAN SALVADOR	1.24	20.993	84795.63g	2051.39	82744.23	
50% = 3.19, 25% = 3.313; HRNN 3-A=3.19 XEZX/A=0.90								
YSR-D (155)	ES	SAN SALVADOR	1.24	21.754	87878.60g	2051.39	85827.20	
50% = 3.183, 25% = 3.307; HRNN 3-A=3.18 XEZX/A=0.90								
YSR-D (160)	ES	SAN SALVADOR	1.24	22.364	90348.14g	2051.39	88296.74	
50% = 3.181, 25% = 3.305; HRNN 3-A=3.18 XEZX/A=0.90								
YSR-D (165)	ES	SAN SALVADOR	1.24	22.757	91942.64g	2051.39	89891.25	
50% = 3.179, 25% = 3.303; HRNN 3-A=3.18 XEZX/A=0.90								
YSR-D (170)	ES	SAN SALVADOR	1.24	23.009	92967.42g	2051.39	90916.02	
50% = 3.177, 25% = 3.302; HRNN 3-A=3.18 XEZX/A=0.90								
YSR-D (175)	ES	SAN SALVADOR	1.24	23.096	93325.54g	2051.39	91274.15	
50% = 3.171, 25% = 3.296; HRNN 3-A=3.17 XEZX/A=0.90								
YSR-D (180)	ES	SAN SALVADOR	1.24	23.001	92950.43g	2051.39	90899.03	
50% = 3.17, 25% = 3.295; HRNN 3-A=3.17 XEZX/A=0.90								
YSR-D (185)	ES	SAN SALVADOR	1.24	22.720	91820.56g	2051.39	89769.16	
50% = 3.168, 25% = 3.293; HRNN 3-A=3.17 XEZX/A=0.90								
YSR-D (190)	ES	SAN SALVADOR	1.24	22.244	89903.46g	2051.39	87852.07	
50% = 3.162, 25% = 3.288; HRNN 3-A=3.16 XEZX/A=0.90								
YSR-D (195)	ES	SAN SALVADOR	1.24	21.573	87198.20g	2051.39	85146.81	
50% = 3.16, 25% = 3.286; HRNN 3-A=3.16 XEZX/A=0.90								
YSR-D (200)	ES	SAN SALVADOR	1.24	20.715	83739.34g	2051.39	81687.95	
50% = 3.158, 25% = 3.284; HRNN 3-A=3.16 XEZX/A=0.90								
YSR-D (205)	ES	SAN SALVADOR	1.24	19.669	79517.20g	2051.39	77465.80	
50% = 3.155, 25% = 3.281; HRNN 3-A=3.15 XEZX/A=0.90								
YSR-D (210)	ES	SAN SALVADOR	1.24	18.451	74598.69g	2051.39	72547.30	
50% = 3.151, 25% = 3.278; HRNN 3-A=3.15 XEZX/A=0.90								
YSR-D (215)	ES	SAN SALVADOR	1.24	17.065	69004.74g	2051.39	66953.35	
50% = 3.147, 25% = 3.274; HRNN 3-A=3.15 XEZX/A=0.90								
YSR-D (220)	ES	SAN SALVADOR	1.24	15.525	62783.14g	2051.39	60731.75	
50% = 3.141, 25% = 3.269; HRNN 3-A=3.14 XEZX/A=0.90								
YSR-D (225)	ES	SAN SALVADOR	1.24	13.843	55991.81g	2051.39	53940.41	
50% = 3.134, 25% = 3.262; HRNN 3-A=3.13 XEZX/A=0.91								
YSR-D (230)	ES	SAN SALVADOR	1.24	12.046	48731.33g	2051.39	46679.94	
50% = 3.128, 25% = 3.257; HRNN 3-A=3.13 XEZX/A=0.91								
YSR-D (235)	ES	SAN SALVADOR	1.24	10.153	41081.35g	2051.39	39029.96	
50% = 3.115, 25% = 3.244; HRNN 3-A=3.11 XEZX/A=0.91								
YSR-D (240)	ES	SAN SALVADOR	1.24	8.193	33160.72g	2051.39	31109.33	
50% = 3.104, 25% = 3.234; HRNN 3-A=3.10 XEZX/A=0.91								
YSR-D (245)	ES	SAN SALVADOR	1.24	6.477	26216.35g	2051.39	24164.96	
50% = 3.089, 25% = 3.221; HRNN 3-A=3.09 XEZX/A=0.91								
YSR-D (250)	ES	SAN SALVADOR	1.24	5.832	23567.05g	2051.39	21515.66	
50% = 3.086, 25% = 3.218; HRNN 3-A=3.09 XEZX/A=0.92								
YSR-D (255)	ES	SAN SALVADOR	1.24	5.133	20698.46g	2051.39	18647.07	
50% = 3.081, 25% = 3.215; HRNN 3-A=3.08 XEZX/A=0.92								
YSR-D (260)	ES	SAN SALVADOR	1.24	4.390	17659.96g	2051.39	15608.57	
50% = 3.074, 25% = 3.21; HRNN 3-A=3.07 XEZX/A=0.92								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
YSR-D (265)	ES	SAN SALVADOR		1.25	3.615	14500.85g	2051.39	12449.46
50% = 3.065, 25% = 3.202; HRNN 3-A=3.06 XEZX/A=0.93								
YSR-D (270)	ES	SAN SALVADOR		1.25	2.834	11326.47g	2051.39	9275.08
50% = 3.054, 25% = 3.194; HRNN 3-A=3.05 XEZX/A=0.93								
YSR-D (275)	ES	SAN SALVADOR		1.26	2.082	8277.02g	2051.39	6225.63
50% = 3.039, 25% = 3.182; HRNN 3-A=3.04 XEZX/A=0.94								
YSR-D (280)	ES	SAN SALVADOR		1.27	1.509	5955.40P	2051.39	3904.01
50% = 3.017, 25% = 3.164; HRNN 3-A=3.02 XEZX/A=0.95								
YSR-D (285)	ES	SAN SALVADOR		1.31	1.330	5075.23P	2051.39	3023.83
50% = 2.659, 25% = 2.949; HRNN 3-A=2.66 XEZX/A=1.03 WGN=0.75								
YSR-D (290)	ES	SAN SALVADOR		1.35	1.299	4820.84P	2051.39	2769.44
50% = 2.598, 25% = 3.007; HRNN 3-A=2.60 XEZX/A=1.06 WGN=0.77 XEAVR/A=0.75								
YSR-D (295)	ES	SAN SALVADOR		1.38	1.313	4764.62P	2051.39	2713.22
50% = 2.627, 25% = 2.953; HRNN 3-A=2.63 XEZX/A=1.10 WGN=0.79								
YSR-D (300)	ES	SAN SALVADOR		1.41	1.331	4724.84P	2051.39	2673.45
50% = 2.662, 25% = 3.001; HRNN 3-A=2.66 XEZX/A=1.13 WGN=0.80								
YSR-D (305)	ES	SAN SALVADOR		1.45	1.338	4621.91S	2051.39	2570.52
50% = 2.676, 25% = 3.033; HRNN 3-A=2.68 XEZX/A=1.16 WGN=0.83								
YSR-D (310)	ES	SAN SALVADOR		1.48	1.363	4601.70S	2051.39	2550.31
50% = 2.726, 25% = 3.096; HRNN 3-A=2.73 XEZX/A=1.20 WGN=0.85								
YSR-D (315)	ES	SAN SALVADOR		1.51	1.390	4593.02S	2051.39	2541.63
50% = 2.779, 25% = 3.164; HRNN 3-A=2.78 XEZX/A=1.24 WGN=0.86								
YSR-D (320)	ES	SAN SALVADOR		1.54	1.416	4589.27S	2051.39	2537.88
50% = 2.833, 25% = 3.226; HRNN 3-A=2.83 XEZX/A=1.27 WGN=0.88								
YSR-D (325)	ES	SAN SALVADOR		1.55	1.461	4706.35P	2051.39	2654.95
50% = 2.923, 25% = 3.306; HRNN 3-A=2.92 XEZX/A=1.27 WGN=0.89								
YSR-D (330)	ES	SAN SALVADOR		1.56	1.513	4860.16P	2051.39	2808.77
50% = 3.026, 25% = 3.394; HRNN 3-A=3.03 XEZX/A=1.25 WGN=0.89								
YSR-D (335)	ES	SAN SALVADOR		1.56	1.560	4999.16P	2051.39	2947.77
50% = 3.12, 25% = 3.471; HRNN 3-A=3.12 XEZX/A=1.23 WGN=0.89								
YSR-D (340)	ES	SAN SALVADOR		1.65	1.555	4721.14S	2051.39	2669.75
50% = 3.109, 25% = 3.494; HRNN 3-A=3.11 XEZX/A=1.29 WGN=0.94								
YSR-D (345)	ES	SAN SALVADOR		1.66	1.595	4792.64S	2051.39	2741.24
50% = 3.189, 25% = 3.559; HRNN 3-A=3.19 XEZX/A=1.26 WGN=0.95								
YSR-D (350)	ES	SAN SALVADOR		1.68	1.638	4884.46S	2051.39	2833.06
50% = 3.276, 25% = 3.627; HRNN 3-A=3.28 XEZX/A=1.23 WGN=0.96								
YSR-D (355)	ES	SAN SALVADOR		1.69	1.683	4994.77S	2051.39	2943.37
50% = 3.367, 25% = 3.699; HRNN 3-A=3.37 XEZX/A=1.19 WGN=0.96								
TGRO-D (0)	GT	CORONA		1.68	1.782	5312.94S	2051.39	3261.54
50% = 3.565, 25% = 3.857; HRNN 3-A=3.56 XEZX/A=1.12 WGN=0.96								
TGRO-D (5)	GT	CORONA		1.69	1.797	5301.09S	2051.39	3249.69
50% = 3.593, 25% = 3.883; HRNN 3-A=3.59 XEZX/A=1.11 WGN=0.97								
TGRO-D (10)	GT	CORONA		1.71	1.809	5277.80S	2051.39	3226.41
50% = 3.618, 25% = 3.905; HRNN 3-A=3.62 XEZX/A=1.10 WGN=0.98								
TGRO-D (15)	GT	CORONA		1.72	1.828	5309.13S	2051.39	3257.73
50% = 3.655, 25% = 3.936; HRNN 3-A=3.66 XEZX/A=1.08 WGN=0.98								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
TGRO-D (20)	GT	CORONA		1.82	1.785	4899.76S	2051.39	2848.37
50% = 3.57, 25% = 3.862; HRNN 3-A=3.57			XEZX/A=1.04 WGN=1.04					
TGRO-D (25)	GT	CORONA		1.85	1.786	4834.12P	2051.39	2782.72
50% = 3.572, 25% = 3.861; HRNN 3-A=3.57			WGN=1.06 XEZX/A=1.02					
TGRO-D (30)	GT	CORONA		1.80	1.845	5125.26P	2051.39	3073.86
50% = 3.691, 25% = 3.961; HRNN 3-A=3.69			WGN=1.03 XEZX/A=1.00					
TGRO-D (35)	GT	CORONA		1.55	3.612	11617.10g	2051.39	9565.71
50% = 3.818, 25% = 3.959; HRNN 3-A=3.82			XEZX/A=1.05					
TGRO-D (40)	GT	CORONA		1.55	3.193	10293.66g	2051.39	8242.26
50% = 3.836, 25% = 3.975; HRNN 3-A=3.84			XEZX/A=1.04					
TGRO-D (45)	GT	CORONA		1.55	2.536	8192.88g	2051.39	6141.48
50% = 3.854, 25% = 3.992; HRNN 3-A=3.85			XEZX/A=1.04					
TGRO-D (50)	GT	CORONA		1.55	2.376	7687.06g	2051.39	5635.66
50% = 3.877, 25% = 4.012; HRNN 3-A=3.88			XEZX/A=1.03					
TGRO-D (55)	GT	CORONA		1.54	3.461	11209.23g	2051.39	9157.84
50% = 3.895, 25% = 4.028; HRNN 3-A=3.90			XEZX/A=1.02					
TGRO-D (60)	GT	CORONA		1.54	2.787	9035.08g	2051.39	6983.69
50% = 3.958, 25% = 4.086; HRNN 3-A=3.96			XEZX/A=1.01					
TGRO-D (65)	GT	CORONA		1.55	2.122	6846.13P	2051.39	4794.74
50% = 4.244, 25% = 4.244; HRNN 3-A=4.24								
TGRO-D (70)	GT	CORONA		1.63	2.088	6412.80S	2051.39	4361.40
50% = 4.176, 25% = 4.176; HRNN 3-A=4.18								
TGRO-D (75)	GT	CORONA		1.55	0.884	2856.06S	2051.39	804.67
50% = 1.284, 25% = 1.693; XEZX/A=0.93			WGN=0.88 XECPQ/A=0.60 HCCB4-A=0.55					
HCJC1-A=0.55			WRZN=0.50					
TGRO-D (80)	GT	CORONA		1.52	0.867	2856.07S	2051.39	804.67
50% = 1.292, 25% = 1.684; XEZX/A=0.96			WGN=0.87 XECPQ/A=0.59 HCCB4-A=0.55					
HCJC1-A=0.55			WRZN=0.46					
TGRO-D (85)	GT	CORONA		1.50	2.142	7125.30S	2051.39	5073.90
50% = 4.284, 25% = 4.284; HRNN 3-A=4.28								
TGRO-D (90)	GT	CORONA		1.49	2.133	7150.26S	2051.39	5098.87
50% = 4.266, 25% = 4.266; HRNN 3-A=4.27								
TGRO-D (95)	GT	CORONA		1.48	2.127	7187.04S	2051.39	5135.65
50% = 4.255, 25% = 4.255; HRNN 3-A=4.25								
TGRO-D (100)	GT	CORONA		1.47	2.130	7258.33S	2051.39	5206.94
50% = 4.26, 25% = 4.26; HRNN 3-A=4.26								
TGRO-D (105)	GT	CORONA		1.46	2.109	7241.35S	2051.39	5189.95
50% = 4.217, 25% = 4.217; HRNN 3-A=4.22								
TGRO-D (110)	GT	CORONA		1.45	2.071	7165.73S	2051.39	5114.33
50% = 4.143, 25% = 4.143; HRNN 3-A=4.14								
TGRO-D (115)	GT	CORONA		1.43	2.044	7131.63S	2051.39	5080.24
50% = 4.087, 25% = 4.087; HRNN 3-A=4.09								
TGRO-D (120)	GT	CORONA		1.43	1.962	6874.06S	2051.39	4822.67
50% = 3.925, 25% = 3.925; HRNN 3-A=3.92								
TGRO-D (125)	GT	CORONA		1.42	1.947	6850.85S	2051.39	4799.45
50% = 3.894, 25% = 3.894; HRNN 3-A=3.89								
TGRO-D (130)	GT	CORONA		1.42	1.931	6797.08S	2051.39	4745.68
50% = 3.863, 25% = 3.863; HRNN 3-A=3.86								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
TGRO-D (135)	GT	CORONA		1.41	1.919	6784.01S	2051.39	4732.62
50% = 3.838, 25% = 3.838; HRNN 3-A=3.84								
TGRO-D (140)	GT	CORONA		1.41	1.899	6740.86S	2051.39	4689.46
50% = 3.798, 25% = 3.918; HRNN 3-A=3.80 XEZX/A=0.96								
TGRO-D (145)	GT	CORONA		1.40	1.873	6671.97S	2051.39	4620.58
50% = 3.746, 25% = 3.867; HRNN 3-A=3.75 XEZX/A=0.96								
TGRO-D (150)	GT	CORONA		1.40	1.854	6626.16S	2051.39	4574.76
50% = 3.708, 25% = 3.831; HRNN 3-A=3.71 XEZX/A=0.96								
TGRO-D (155)	GT	CORONA		1.39	1.842	6604.53S	2051.39	4553.14
50% = 3.685, 25% = 3.81; HRNN 3-A=3.68 XEZX/A=0.97								
TGRO-D (160)	GT	CORONA		1.39	1.830	6577.30S	2051.39	4525.91
50% = 3.661, 25% = 3.787; HRNN 3-A=3.66 XEZX/A=0.97								
TGRO-D (165)	GT	CORONA		1.39	1.815	6549.83S	2051.39	4498.43
50% = 3.63, 25% = 3.757; HRNN 3-A=3.63 XEZX/A=0.97								
TGRO-D (170)	GT	CORONA		1.38	1.795	6504.93S	2051.39	4453.53
50% = 3.589, 25% = 3.718; HRNN 3-A=3.59 XEZX/A=0.97								
TGRO-D (175)	GT	CORONA		1.38	1.775	6437.49S	2051.39	4386.09
50% = 3.55, 25% = 3.682; HRNN 3-A=3.55 XEZX/A=0.98								
TGRO-D (180)	GT	CORONA		1.38	1.762	6389.60S	2051.39	4338.21
50% = 3.524, 25% = 3.659; HRNN 3-A=3.52 XEZX/A=0.98								
TGRO-D (185)	GT	CORONA		1.38	1.755	6356.75S	2051.39	4305.36
50% = 3.51, 25% = 3.647; HRNN 3-A=3.51 XEZX/A=0.99								
TGRO-D (190)	GT	CORONA		1.38	1.748	6318.07S	2051.39	4266.68
50% = 3.495, 25% = 3.634; HRNN 3-A=3.50 XEZX/A=0.99								
TGRO-D (195)	GT	CORONA		1.39	1.740	6278.43S	2051.39	4227.04
50% = 3.479, 25% = 3.621; HRNN 3-A=3.48 XEZX/A=1.00								
TGRO-D (200)	GT	CORONA		1.39	1.731	6240.06S	2051.39	4188.67
50% = 3.462, 25% = 3.606; HRNN 3-A=3.46 XEZX/A=1.01								
TGRO-D (205)	GT	CORONA		1.39	1.718	6197.69S	2051.39	4146.30
50% = 3.436, 25% = 3.582; HRNN 3-A=3.44 XEZX/A=1.01								
TGRO-D (210)	GT	CORONA		1.39	1.706	6143.90S	2051.39	4092.51
50% = 3.413, 25% = 3.562; HRNN 3-A=3.41 XEZX/A=1.02								
TGRO-D (215)	GT	CORONA		1.39	1.698	6094.30S	2051.39	4042.90
50% = 3.396, 25% = 3.549; HRNN 3-A=3.40 XEZX/A=1.03								
TGRO-D (220)	GT	CORONA		1.40	1.690	6043.83S	2051.39	3992.44
50% = 3.381, 25% = 3.536; HRNN 3-A=3.38 XEZX/A=1.04								
TGRO-D (225)	GT	CORONA		1.40	1.681	5994.41S	2051.39	3943.02
50% = 3.362, 25% = 3.52; HRNN 3-A=3.36 XEZX/A=1.04								
TGRO-D (230)	GT	CORONA		1.40	1.662	5922.64S	2051.39	3871.24
50% = 3.324, 25% = 3.486; HRNN 3-A=3.32 XEZX/A=1.05								
TGRO-D (235)	GT	CORONA		1.40	1.633	5825.13S	2051.39	3773.74
50% = 3.266, 25% = 3.435; HRNN 3-A=3.27 XEZX/A=1.06								
TGRO-D (240)	GT	CORONA		1.43	1.681	5880.29S	2051.39	3828.90
50% = 3.363, 25% = 3.53; HRNN 3-A=3.36 XEZX/A=1.07								
TGRO-D (245)	GT	CORONA		1.44	1.672	5820.23S	2051.39	3768.83
50% = 3.344, 25% = 3.515; HRNN 3-A=3.34 XEZX/A=1.08								
TGRO-D (250)	GT	CORONA		1.44	1.657	5746.00S	2051.39	3694.61
50% = 3.314, 25% = 3.489; HRNN 3-A=3.31 XEZX/A=1.09								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
TGRO-D (255)	GT	CORONA		1.44	1.598	5552.94S	2051.39	3501.55
50% = 3.196, 25% = 3.384; HRNN 3-A=3.20 XEZX/A=1.11								
TGRO-D (260)	GT	CORONA		1.45	1.570	5423.94S	2051.39	3372.55
50% = 3.141, 25% = 3.338; HRNN 3-A=3.14 XEZX/A=1.13								
TGRO-D (265)	GT	CORONA		1.47	1.613	5487.36S	2051.39	3435.96
50% = 3.226, 25% = 3.419; HRNN 3-A=3.23 XEZX/A=1.13								
TGRO-D (270)	GT	CORONA		1.48	1.635	5507.95S	2051.39	3456.55
50% = 3.271, 25% = 3.462; HRNN 3-A=3.27 XEZX/A=1.14								
TGRO-D (275)	GT	CORONA		1.50	1.642	5485.17S	2051.39	3433.77
50% = 3.285, 25% = 3.477; HRNN 3-A=3.28 XEZX/A=1.14								
TGRO-D (280)	GT	CORONA		1.51	1.649	5463.05S	2051.39	3411.66
50% = 3.298, 25% = 3.491; HRNN 3-A=3.30 XEZX/A=1.14								
TGRO-D (285)	GT	CORONA		1.52	1.658	5452.72S	2051.39	3401.32
50% = 3.316, 25% = 3.509; HRNN 3-A=3.32 XEZX/A=1.15								
TGRO-D (290)	GT	CORONA		1.53	1.666	5440.90S	2051.39	3389.51
50% = 3.333, 25% = 3.525; HRNN 3-A=3.33 XEZX/A=1.15								
TGRO-D (295)	GT	CORONA		1.54	1.674	5429.70S	2051.39	3378.31
50% = 3.348, 25% = 3.54; HRNN 3-A=3.35 XEZX/A=1.15								
TGRO-D (300)	GT	CORONA		1.55	1.682	5418.38S	2051.39	3366.99
50% = 3.363, 25% = 3.555; HRNN 3-A=3.36 XEZX/A=1.15								
TGRO-D (305)	GT	CORONA		1.56	1.687	5400.83S	2051.39	3349.44
50% = 3.375, 25% = 3.676; HRNN 3-A=3.37 XEZX/A=1.15 WGN=0.89								
TGRO-D (310)	GT	CORONA		1.57	1.697	5398.05S	2051.39	3346.65
50% = 3.394, 25% = 3.695; HRNN 3-A=3.39 XEZX/A=1.15 WGN=0.90								
TGRO-D (315)	GT	CORONA		1.59	1.692	5320.22S	2051.39	3268.83
50% = 3.384, 25% = 3.693; HRNN 3-A=3.38 XEZX/A=1.17 WGN=0.91								
TGRO-D (320)	GT	CORONA		1.61	1.693	5265.27S	2051.39	3213.87
50% = 3.386, 25% = 3.699; HRNN 3-A=3.39 XEZX/A=1.17 WGN=0.92								
TGRO-D (325)	GT	CORONA		1.62	1.700	5249.82S	2051.39	3198.43
50% = 3.401, 25% = 3.714; HRNN 3-A=3.40 XEZX/A=1.17 WGN=0.93								
TGRO-D (330)	GT	CORONA		1.63	1.715	5272.52S	2051.39	3221.13
50% = 3.429, 25% = 3.737; HRNN 3-A=3.43 XEZX/A=1.16 WGN=0.93								
TGRO-D (335)	GT	CORONA		1.64	1.724	5262.85S	2051.39	3211.45
50% = 3.448, 25% = 3.755; HRNN 3-A=3.45 XEZX/A=1.16 WGN=0.94								
TGRO-D (340)	GT	CORONA		1.65	1.735	5270.67S	2051.39	3219.28
50% = 3.471, 25% = 3.774; HRNN 3-A=3.47 XEZX/A=1.15 WGN=0.94								
TGRO-D (345)	GT	CORONA		1.65	1.746	5286.44S	2051.39	3235.05
50% = 3.492, 25% = 3.794; HRNN 3-A=3.49 XEZX/A=1.14 WGN=0.94								
TGRO-D (350)	GT	CORONA		1.66	1.756	5284.92S	2051.39	3233.53
50% = 3.511, 25% = 3.81; HRNN 3-A=3.51 XEZX/A=1.14 WGN=0.95								
TGRO-D (355)	GT	CORONA		1.67	1.760	5260.05S	2051.39	3208.65
50% = 3.519, 25% = 3.818; HRNN 3-A=3.52 XEZX/A=1.13 WGN=0.96								
UNK-A (0)	GL	SIMIUTAQ		2.17	1.242	2856.41S	2051.39	805.02
50% = 1.819, 25% = 1.875; CHTN/A=1.33 WGN=1.24 NEW MEDICINE HAT/ =0.46								
UNK-A (5)	GL	SIMIUTAQ		2.11	1.204	2856.41S	2051.39	805.02
50% = 1.761, 25% = 1.816; CHTN/A=1.29 WGN=1.20 NEW MEDICINE HAT/ =0.44								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
UNK-A (10)	GL	SIMIUTAQ		2.05	1.172	2856.40S	2051.39	805.01
50% = 1.713, 25% = 1.713; CHTN/A=1.25 WGN=1.17								
UNK-A (15)	GL	SIMIUTAQ		2.00	1.145	2856.40S	2051.39	805.00
50% = 1.671, 25% = 1.671; CHTN/A=1.22 WGN=1.14								
UNK-A (20)	GL	SIMIUTAQ		1.96	1.119	2856.40S	2051.39	805.00
50% = 1.635, 25% = 1.635; CHTN/A=1.19 WGN=1.12								
UNK-A (25)	GL	SIMIUTAQ		1.92	1.095	2856.39S	2051.39	805.00
50% = 1.604, 25% = 1.604; CHTN/A=1.17 WGN=1.10								
UNK-A (30)	GL	SIMIUTAQ		1.88	1.074	2856.39S	2051.39	805.00
50% = 1.579, 25% = 1.628; CHTN/A=1.16 WGN=1.07 ZYI-770-A=0.40								
UNK-A (35)	GL	SIMIUTAQ		1.84	1.054	2856.39S	2051.39	804.99
50% = 1.557, 25% = 1.608; CHTN/A=1.15 WGN=1.05 ZYI-770-A=0.40								
UNK-A (40)	GL	SIMIUTAQ		1.81	1.037	2856.38S	2051.39	804.99
50% = 1.541, 25% = 1.592; CHTN/A=1.14 WGN=1.04 ZYI-770-A=0.40								
UNK-A (45)	GL	SIMIUTAQ		1.79	1.022	2856.38S	2051.39	804.98
50% = 1.528, 25% = 1.582; CHTN/A=1.14 WGN=1.02 ZYI-770-A=0.41								
UNK-A (50)	GL	SIMIUTAQ		1.77	1.009	2856.37S	2051.39	804.98
50% = 1.521, 25% = 1.575; CHTN/A=1.14 WGN=1.01 ZYI-770-A=0.41								
UNK-A (55)	GL	SIMIUTAQ		1.75	0.999	2856.37S	2051.39	804.97
50% = 1.517, 25% = 1.574; CHTN/A=1.14 WGN=1.00 ZYI-770-A=0.42								
UNK-A (60)	GL	SIMIUTAQ		1.74	0.991	2856.36S	2051.39	804.97
50% = 1.519, 25% = 1.577; CHTN/A=1.15 WGN=0.99 ZYI-770-A=0.42								
UNK-A (65)	GL	SIMIUTAQ		1.73	0.986	2856.36S	2051.39	804.96
50% = 1.526, 25% = 1.585; CHTN/A=1.16 WGN=0.99 ZYI-770-A=0.43								
UNK-A (70)	GL	SIMIUTAQ		1.72	0.984	2856.35S	2051.39	804.96
50% = 1.541, 25% = 1.6; CHTN/A=1.19 WGN=0.98 ZYI-770-A=0.43								
UNK-A (75)	GL	SIMIUTAQ		1.72	0.984	2856.35S	2051.39	804.95
50% = 1.561, 25% = 1.621; CHTN/A=1.21 WGN=0.98 ZYI-770-A=0.44								
UNK-A (80)	GL	SIMIUTAQ		1.73	0.987	2856.34S	2051.39	804.95
50% = 1.587, 25% = 1.648; CHTN/A=1.24 WGN=0.99 ZYI-770-A=0.45								
UNK-A (85)	GL	SIMIUTAQ		1.74	0.992	2856.34S	2051.39	804.94
50% = 1.62, 25% = 1.682; CHTN/A=1.28 WGN=0.99 ZYI-770-A=0.45								
UNK-A (90)	GL	SIMIUTAQ		1.75	1.000	2856.33S	2051.39	804.94
50% = 1.664, 25% = 1.726; CHTN/A=1.33 WGN=1.00 ZYI-770-A=0.46								
UNK-A (95)	GL	SIMIUTAQ		1.77	1.010	2856.33S	2051.39	804.93
50% = 1.717, 25% = 1.778; CHTN/A=1.39 WGN=1.01 ZYI-770-A=0.47								
UNK-A (100)	GL	SIMIUTAQ		1.79	1.023	2856.32S	2051.39	804.93
50% = 1.769, 25% = 1.831; CHTN/A=1.44 WGN=1.02 ZYI-770-A=0.47								
UNK-A (105)	GL	SIMIUTAQ		1.82	1.038	2856.32S	2051.39	804.92
50% = 1.821, 25% = 1.883; CHTN/A=1.50 WGN=1.04 ZYI-770-A=0.48								
UNK-A (110)	GL	SIMIUTAQ		1.85	1.056	2856.31S	2051.39	804.92
50% = 1.887, 25% = 1.949; CHTN/A=1.56 WGN=1.06 ZYI-770-A=0.48								
UNK-A (115)	GL	SIMIUTAQ		1.88	1.076	2856.31S	2051.39	804.92
50% = 1.982, 25% = 1.982; CHTN/A=1.66 WGN=1.08								
UNK-A (120)	GL	SIMIUTAQ		1.92	1.098	2856.31S	2051.39	804.91
50% = 2.088, 25% = 2.088; CHTN/A=1.78 WGN=1.10								
UNK-A (125)	GL	SIMIUTAQ		1.96	1.122	2856.31S	2051.39	804.91
50% = 2.205, 25% = 2.205; CHTN/A=1.90 WGN=1.12								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
UNK-A (130)	GL	SIMIUTAQ	2.01	1.148	2856.30S	2051.39	804.91	
50% = 2.34, 25% = 2.34; CHTN/A=2.04 WGN=1.15								
UNK-A (135)	GL	SIMIUTAQ	2.06	1.176	2856.30S	2051.39	804.91	
50% = 2.497, 25% = 2.497; CHTN/A=2.20 WGN=1.18								
UNK-A (140)	GL	SIMIUTAQ	2.11	1.208	2856.29S	2051.39	804.89	
50% = 2.699, 25% = 2.699; CHTN/A=2.41 WGN=1.21								
UNK-A (145)	GL	SIMIUTAQ	2.18	1.335	3059.10S	2051.39	1007.71	
50% = 2.67, 25% = 2.947; CHTN/A=2.67 WGN=1.25								
UNK-A (150)	GL	SIMIUTAQ	2.26	1.479	3272.97S	2051.39	1221.57	
50% = 2.959, 25% = 3.228; CHTN/A=2.96 WGN=1.29								
UNK-A (155)	GL	SIMIUTAQ	2.35	1.646	3506.04S	2051.39	1454.65	
50% = 3.292, 25% = 3.555; CHTN/A=3.29 WGN=1.34								
UNK-A (160)	GL	SIMIUTAQ	2.44	1.845	3787.12S	2051.39	1735.73	
50% = 3.69, 25% = 3.943; CHTN/A=3.69 WGN=1.39								
UNK-A (165)	GL	SIMIUTAQ	2.53	2.082	4114.56S	2051.39	2063.16	
50% = 4.163, 25% = 4.407; CHTN/A=4.16 WGN=1.45								
UNK-A (170)	GL	SIMIUTAQ	2.64	2.357	4470.67S	2051.39	2419.28	
50% = 4.713, 25% = 4.948; CHTN/A=4.71 WGN=1.51								
UNK-A (175)	GL	SIMIUTAQ	2.75	2.659	4832.44S	2051.39	2781.04	
50% = 5.317, 25% = 5.545; CHTN/A=5.32 WGN=1.57								
UNK-A (180)	GL	SIMIUTAQ	2.87	2.960	5149.55S	2051.39	3098.15	
50% = 5.92, 25% = 6.144; CHTN/A=5.92 WGN=1.64								
UNK-A (185)	GL	SIMIUTAQ	2.99	3.274	5467.96S	2051.39	3416.56	
50% = 6.548, 25% = 6.768; CHTN/A=6.55 WGN=1.71								
UNK-A (190)	GL	SIMIUTAQ	3.12	3.596	5764.88S	2051.39	3713.48	
50% = 7.193, 25% = 7.193; CHTN/A=7.19								
UNK-A (195)	GL	SIMIUTAQ	3.26	3.913	5997.29S	2051.39	3945.90	
50% = 7.825, 25% = 7.825; CHTN/A=7.83								
UNK-A (200)	GL	SIMIUTAQ	3.40	4.209	6188.34S	2051.39	4136.95	
50% = 8.418, 25% = 8.418; CHTN/A=8.42								
UNK-A (205)	GL	SIMIUTAQ	3.53	4.475	6335.03S	2051.39	4283.63	
50% = 8.95, 25% = 8.95; CHTN/A=8.95								
UNK-A (210)	GL	SIMIUTAQ	3.67	4.697	6403.56S	2051.39	4352.17	
50% = 9.393, 25% = 9.393; CHTN/A=9.39								
UNK-A (215)	GL	SIMIUTAQ	3.80	4.858	6387.49S	2051.39	4336.09	
50% = 9.717, 25% = 9.717; CHTN/A=9.72								
UNK-A (220)	GL	SIMIUTAQ	3.93	4.949	6292.42S	2051.39	4241.02	
50% = 9.899, 25% = 9.899; CHTN/A=9.90								
UNK-A (225)	GL	SIMIUTAQ	4.06	4.966	6120.91S	2051.39	4069.51	
50% = 9.933, 25% = 9.933; CHTN/A=9.93								
UNK-A (230)	GL	SIMIUTAQ	4.17	4.907	5890.28S	2051.39	3838.89	
50% = 9.815, 25% = 9.815; CHTN/A=9.81								
UNK-A (235)	GL	SIMIUTAQ	4.26	4.769	5601.80S	2051.39	3550.40	
50% = 9.539, 25% = 9.844; CHTN/A=9.54 WGN=2.43								
UNK-A (240)	GL	SIMIUTAQ	4.33	4.565	5271.18S	2051.39	3219.79	
50% = 9.131, 25% = 9.46; CHTN/A=9.13 WGN=2.47								
UNK-A (245)	GL	SIMIUTAQ	4.38	4.308	4917.41S	2051.39	2866.01	
50% = 8.616, 25% = 8.972; CHTN/A=8.62 WGN=2.50								

FIGURE 4
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Call Letters	Ct	St	City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
UNK-A (250)	GL	SIMIUTAQ	4.40	4.011	4553.17S	2051.39	2501.77	
50% = 8.022, 25% = 8.408; CHTN/A=8.02 WGN=2.52								
UNK-A (255)	GL	SIMIUTAQ	4.40	3.689	4189.10S	2051.39	2137.70	
50% = 7.378, 25% = 7.795; CHTN/A=7.38 WGN=2.52								
UNK-A (260)	GL	SIMIUTAQ	4.38	3.360	3838.85S	2051.39	1787.46	
50% = 6.719, 25% = 7.169; CHTN/A=6.72 WGN=2.50								
UNK-A (265)	GL	SIMIUTAQ	4.32	3.037	3512.19S	2051.39	1460.79	
50% = 6.074, 25% = 6.557; CHTN/A=6.07 WGN=2.47								
UNK-A (270)	GL	SIMIUTAQ	4.25	2.717	3199.00S	2051.39	1147.61	
50% = 5.435, 25% = 5.952; CHTN/A=5.43 WGN=2.43								
UNK-A (275)	GL	SIMIUTAQ	4.15	2.404	2893.34S	2051.39	841.94	
50% = 4.808, 25% = 5.361; CHTN/A=4.81 WGN=2.37								
UNK-A (280)	GL	SIMIUTAQ	4.04	2.310	2856.41S	2051.39	805.01	
50% = 4.841, 25% = 4.841; CHTN/A=4.25 WGN=2.31								
UNK-A (285)	GL	SIMIUTAQ	3.92	2.238	2856.41S	2051.39	805.02	
50% = 4.393, 25% = 4.393; CHTN/A=3.78 WGN=2.24								
UNK-A (290)	GL	SIMIUTAQ	3.79	2.164	2856.42S	2051.39	805.02	
50% = 4.019, 25% = 4.019; CHTN/A=3.39 WGN=2.16								
UNK-A (295)	GL	SIMIUTAQ	3.65	2.086	2856.42S	2051.39	805.03	
50% = 3.696, 25% = 3.696; CHTN/A=3.05 WGN=2.09								
UNK-A (300)	GL	SIMIUTAQ	3.52	2.009	2856.42S	2051.39	805.03	
50% = 3.41, 25% = 3.41; CHTN/A=2.75 WGN=2.01								
UNK-A (305)	GL	SIMIUTAQ	3.39	1.934	2856.43S	2051.39	805.03	
50% = 3.158, 25% = 3.158; CHTN/A=2.50 WGN=1.93								
UNK-A (310)	GL	SIMIUTAQ	3.25	1.854	2856.44S	2051.39	805.04	
50% = 2.952, 25% = 2.952; CHTN/A=2.30 WGN=1.85								
UNK-A (315)	GL	SIMIUTAQ	3.10	1.773	2856.44S	2051.39	805.05	
50% = 2.768, 25% = 2.768; CHTN/A=2.13 WGN=1.77								
UNK-A (320)	GL	SIMIUTAQ	2.98	1.703	2856.43S	2051.39	805.04	
50% = 2.615, 25% = 2.615; CHTN/A=1.98 WGN=1.70								
UNK-A (325)	GL	SIMIUTAQ	2.86	1.634	2856.44S	2051.39	805.04	
50% = 2.472, 25% = 2.472; CHTN/A=1.86 WGN=1.63								
UNK-A (330)	GL	SIMIUTAQ	2.74	1.564	2856.44S	2051.39	805.04	
50% = 2.338, 25% = 2.338; CHTN/A=1.74 WGN=1.56								
UNK-A (335)	GL	SIMIUTAQ	2.62	1.499	2856.43S	2051.39	805.04	
50% = 2.22, 25% = 2.22; CHTN/A=1.64 WGN=1.50								
UNK-A (340)	GL	SIMIUTAQ	2.52	1.438	2856.43S	2051.39	805.04	
50% = 2.132, 25% = 2.132; CHTN/A=1.57 WGN=1.44								
UNK-A (345)	GL	SIMIUTAQ	2.43	1.386	2856.42S	2051.39	805.03	
50% = 2.053, 25% = 2.053; CHTN/A=1.51 WGN=1.39								
UNK-A (350)	GL	SIMIUTAQ	2.34	1.335	2856.43S	2051.39	805.03	
50% = 1.967, 25% = 1.967; CHTN/A=1.44 WGN=1.34								
UNK-A (355)	GL	SIMIUTAQ	2.25	1.286	2856.42S	2051.39	805.03	
50% = 1.887, 25% = 1.887; CHTN/A=1.38 WGN=1.29								

Call Letters	Ct St City	SWFF (100uV/m)	Req Prot (mV/m)	Permis (mV/m)	Cur Rad (mV/m)	Margin (mV/m)
KDWN	US NV LAS VEGAS	7.60	4.341	2856.68	2051.39	805.28
	50% = 4.341, 25% = 4.508; WGN=4.34 ZYK276-A=1.22					
NEW KELOWNA/	CA BC KELOWNA	5.33	3.043	2856.97	2051.39	805.58
	50% = 5.721, 25% = 5.721; NEW MEDICINE HAT/ =3.91 WGN=3.04 KDWN=2.86					
XEAVR/O	MX VC ALVARADO	4.80	2.926	3050.88	2051.39	999.49
	50% = 6.377, 25% = 7.296; KSAH=4.37 HRNN 3-A=3.60 XEKN/A=2.93 WGN=2.74					
	XEZX/A=2.25					