

Exhibit to WCGX Application
Minor Change
Dublin, Ohio
Facility ID: 40170

This exhibit presents the technical details of a "One-Step" class change of WCGX from Class B1 to Class A, with a change in antenna location. No change in principal community or channel is proposed.

We have determined that a supplemental method of depicting city grade coverage from the antenna location, as provided in §73.313(e) of the Commission's rules, is appropriate and is part of this application.

Assignment Location

A compliant assignment location¹ has been identified meeting the requirements of spacing and community coverage, and thought to be compliant with other Commission policies and procedures.

Spacing Compliance

Figure 1 is a spacing study from the proposed assignment location. Other than the present WCGX facilities, the study indicates no short spacing exists to any other facility, application, or allocation, thus the assignment location complies fully with Section 73.207.

Principal Community Signal

Figure 2 is a map of a 70 dBu contour and the civic boundary of the WCGX principal community demonstrating compliance with Section 73.315 of the Commission's rules.

Antenna Location

The proposed antenna location for WCGX is 170 meters above ground on the tower identified by antenna structure registration number 1029036. The FCC provided web tools have been used to determine the height above average terrain of 144 meters, see Figure 4; and an equivalent power of 3.0 kW, see Figure 5, to be applicable at this location.

¹ 40° 04' 55.8" N 83° 07' 44.3" W Further identified by ASR No. 1202294.

Spacing Compliance

Attached as Figure 3 is a spacing study from the proposed antenna location; other than the present WCGX facilities, this proposal is in accordance with Section 73.215 of the Commission's rules.

Supplemental Community Coverage

The proposed WCGX city grade contour (3.16 mV/m, 70 dBu) does not completely encompass the principal community when utilizing the standard FCC method of calculating the contour² from the antenna location. We have determined that a supplemental method of depicting city grade coverage, as provided in §73.313(e) of the Commission's rules, is appropriate. As shown below, the supplementary determined distance to contour exceeds that predicted by the standard method by more than 30%.

The principal community falls in an arc between 292° and 336° from the proposed WCGX transmitter site. Analyzing individual radials from the proposed WCGX site toward the community, we have determined the location of the city grade 70 dBu (3.16 mV/m) contour based on the standard utilization of the Commission's F50:50 curves.

We have alternatively determined the location of the city grade 70 dBu (3.16 mV/m) signal using the Longley-Rice coverage model, based on NBS Technical Note #101 methodology as implemented in the V-Soft microcomputer program "Probe 4". In this instant proposal this alternative method provides a more representative prediction of field strength than the standard methodology. A summary of the data and a tabulation of the results of this report, at one degree intervals, is attached.

The distances in the direction of concern depicted by Longley-Rice are in excess of 30% higher than the distances predicted using the Commission's standard methodology.³ Based on the Commission and staff policy,⁴ we find that the predicted

² §73.313(c) and §73.333.

³ On average, 84% further utilizing the supplemental methodology.

⁴ See *Amendments of Parts 73 and 74 of the Commission's Rules to Permit Certain Minor Changes in Broadcast Facilities Without a Construction Permit*,

distance of the contour on these pertinent radials varies widely from the standard methodology, therefore, pursuant to §73.313(e), a supplemental method of depicting city grade coverage is acceptable.

Using this supplemental method, as visually demonstrated in Figure 6 and documented in the tabulation of Figure 7, we find that the city grade contour, in the direction of the principal community,⁵ extends well beyond the community boundary. Therefore, based on the supplemental showing, we find that the principal community is completely encompassed by the city grade contour of the proposed WCGX facility, in compliance with §73.315 of the Commission's rules.

Radio Frequency Radiation Study and Statement

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The proposed antenna system is an ERI LPX 3 bay half wave spaced array which has been evaluated using the program "FM Model" as EPA type 3, "Rototiller " antenna, mounted with its center of radiation 170 meters above ground level, and operated with an effective radiated power of 3 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 494 meters from the base of the tower, this proposal will contribute worst case, 0.3 microwatts per square centimeter, or 0.03 percent of the allowable ANSI limit for controlled exposure, and 0.15 percent of the allowable limit for uncontrolled exposure. This figure is less than 5% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin

Report and Order, 12 FCC Rcd 12371, 12401-03 (1997); *Skytower Communications - 94.3, LLC*, 25 FCC Rcd 13204 (Chief, Audio Div., Med. Bur. 2010).

⁵ On a bearing of 292° to 336° True from the antenna site.

Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for

Figures and Attachments

Figure 1 - Assignment Location Spacing Study

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                                WCGX @ New Alloc Loc as Class A
                                Citicasters Licenses, Inc.

REFERENCE                      CLASS = A Int = A                      DISPLAY DATES
40 04 55.8 N.                  Current Spacings to 3rd Adj.          DATA  04-10-12
83 07 44.3 W.                  SEARCH 04-10-12
----- Channel 294 - 106.7 MHz -----

Call      Channel  Location      Azi      Dist      FCC      Margin
-----
WCGX      LIC-N 294B1  Dublin      OH      63.9      19.52     142.5     -123.0
R59693    ADD  294B1  Dublin      OH      66.9      20.89     142.5     -121.6
R59693    DEL  294B   Hillsboro  OH      202.0     109.67     177.5     -67.8
R59692    DEL  295B   Marion     OH      359.9      59.04     112.5     -53.5
WXMG      LIC-Z 292A   London     OH      228.9      33.34      30.5       2.8
WQLX      LIC-Z 293A   Chillicothe OH      172.3      84.15      71.5      12.7
WDSJ      LIC  293B   Greenville OH      273.8     126.46     112.5      14.0
WVNO-FM   LIC  291B   Mansfield  OH      29.6      87.24      68.5      18.7
WNKK      LIC  296A   Circleville OH      152.9      52.11      30.5      21.6
WRQK-FM   LIC  295B   Canton     OH      59.7     166.09     112.5      53.6
WYNT      LIC  240A   Caledonia  OH      8.7      67.39       9.5      57.9
WYBZ      LIC  297A   Crooksville OH     109.9      94.22      30.5      63.7
WDTW-FM   LIC  294B   Detroit    MI       1.6     249.95     177.5      72.5
Grandfathered at 61KW @ 155M HAAT
WHLK      LIC  293B   Cleveland  OH      39.0     186.84     112.5      74.3
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Figure 2 - Coverage of Community from Assignment Location

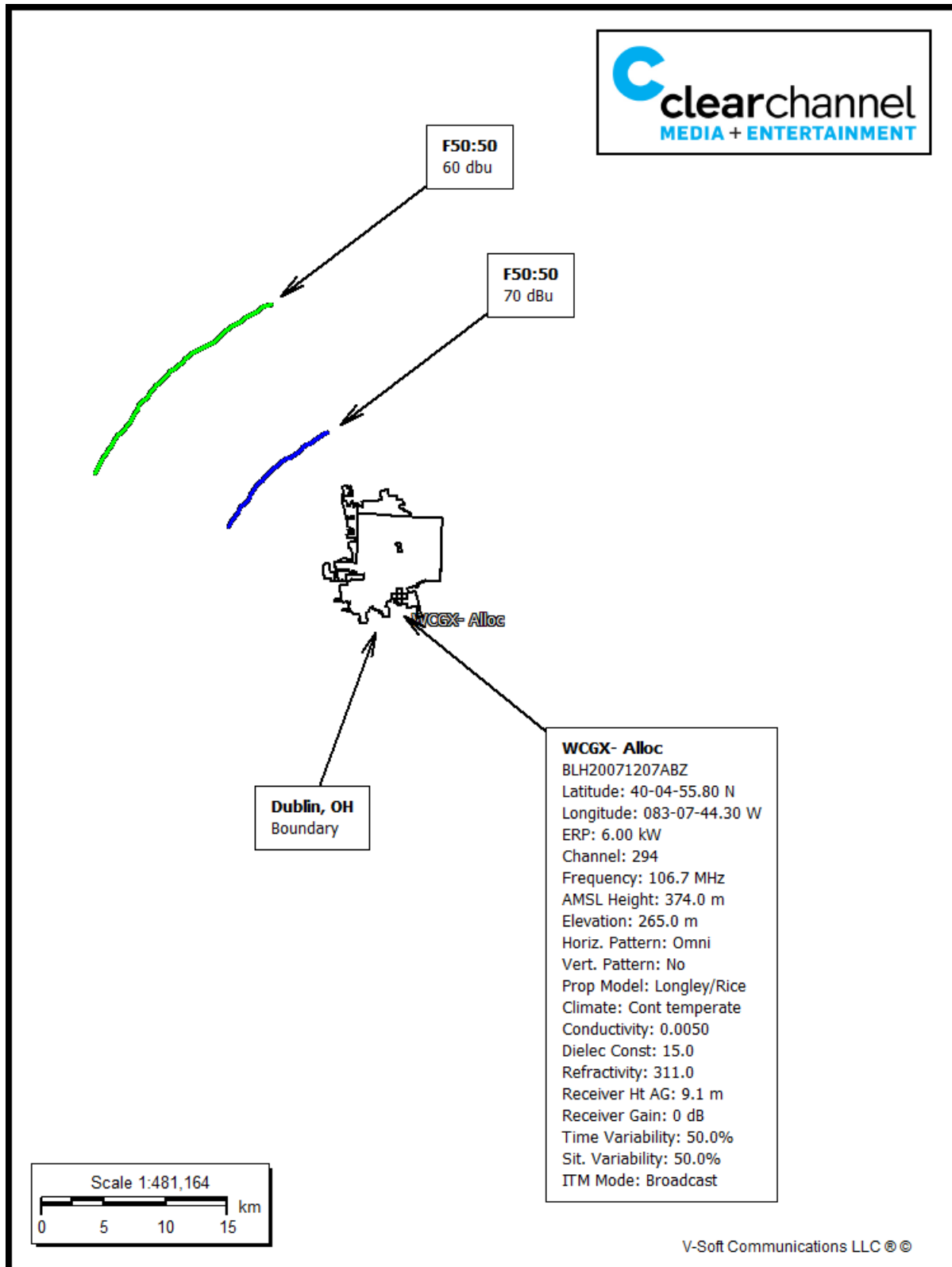


Figure 3 - Antenna Location Spacing Study

Call	Channel	Location	Azi	Dist	FCC	Margin
WCGX	LIC-N 294B1	Dublin	OH 27.5	17.79	142.5	-124.7
R59693	ADD 294B1	Dublin	OH 32.7	18.29	142.5	-124.2
R59693	DEL 294B	Hillsboro	OH 208.2	107.10	177.5	-70.4
R59692	DEL 295B	Marion	OH 352.0	66.91	112.5	-45.6
WQLX	LIC-Z 293A	Chillicothe	OH 178.5	76.19	71.5	4.7
WXMG	LIC-Z 292A	London	OH 246.9	37.46	30.5	7.0
WNKK	LIC 296A	Circleville	OH 159.8	41.73	30.5	11.2
WVNO-FM	LIC 291B	Mansfield	OH 22.2	89.66	68.5	21.2
WDSJ	LIC 293B	Greenville	OH 276.6	136.39	112.5	23.9
WRQK-FM	LIC 295B	Canton	OH 55.9	162.04	112.5	49.5
WYBZ	LIC 297A	Crooksville	OH 107.5	83.08	30.5	52.6
WYNT	LIC 240A	Caledonia	OH 0.8	73.82	9.5	64.3
WHLK	LIC 293B	Cleveland	OH 35.5	186.93	112.5	74.4

Figure 4 – Antenna Location HAAT Calculation

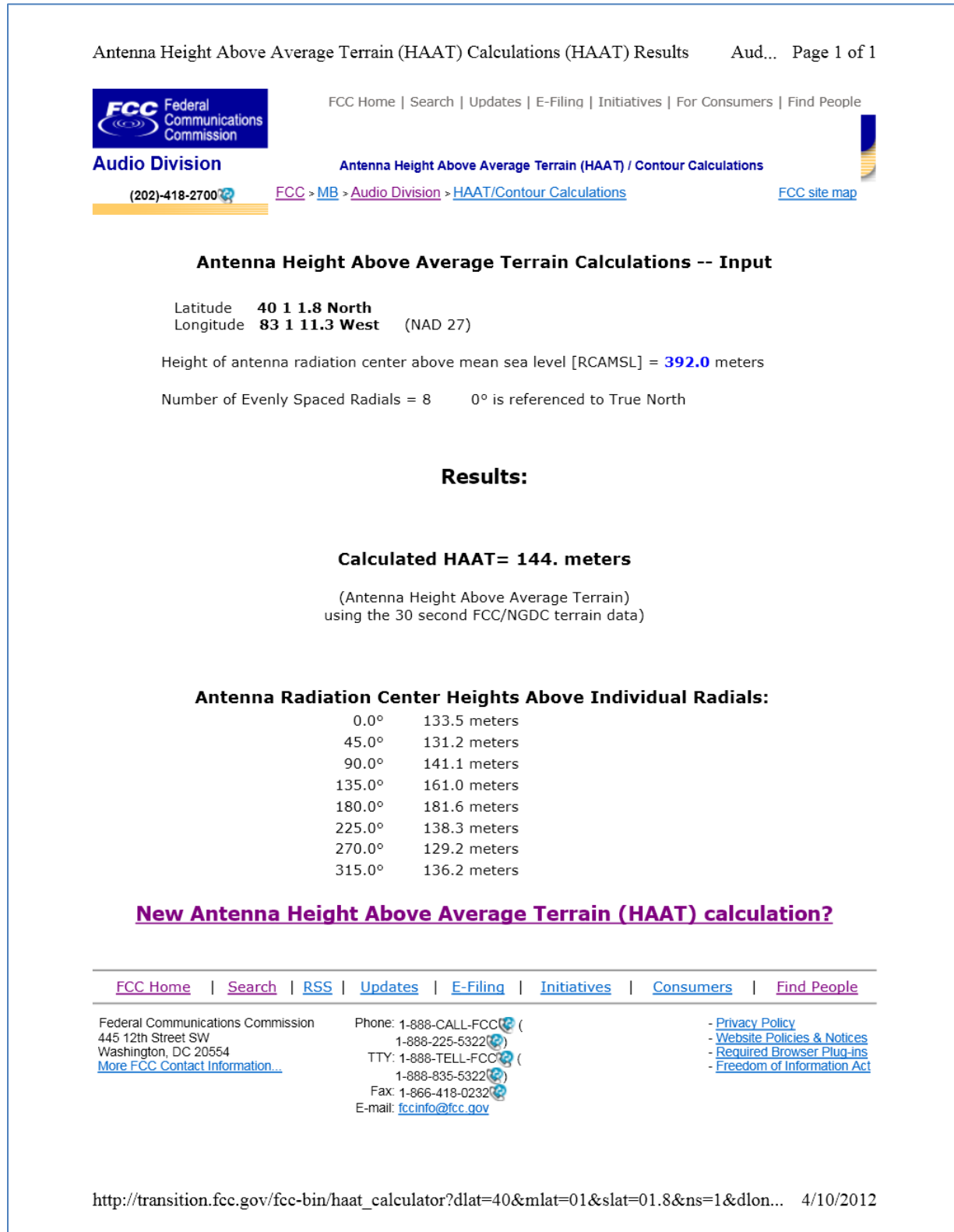



Figure 5 – FMpower, Equivalent Power Determination

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FMpower Results

6 kW ERP Class A facilities for Equivalency Determination:

Reference ERP = 6.000 kW
Reference HAAT = 100.0 meters
F(50,50) 60 dBu protected contour at 28.3 km distance

Equivalent ERP (rounded per 47 CFR 73.212) = 3.000 kW

... at **144.0 meters HAAT**

Unrounded ERP = 2.975 kW for 144.0 meters HAAT

Class A stations are authorized throughout the United States.

Enter New Data in FMpower?

Related items: [FM and TV Propagation Curves](#).
[This document may be accessed at http://www.fcc.gov/mb/audio/bickel/fmpower.html](http://www.fcc.gov/mb/audio/bickel/fmpower.html)

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4/10/2012

Figure 6 - WCGX Supplemental Contour Map

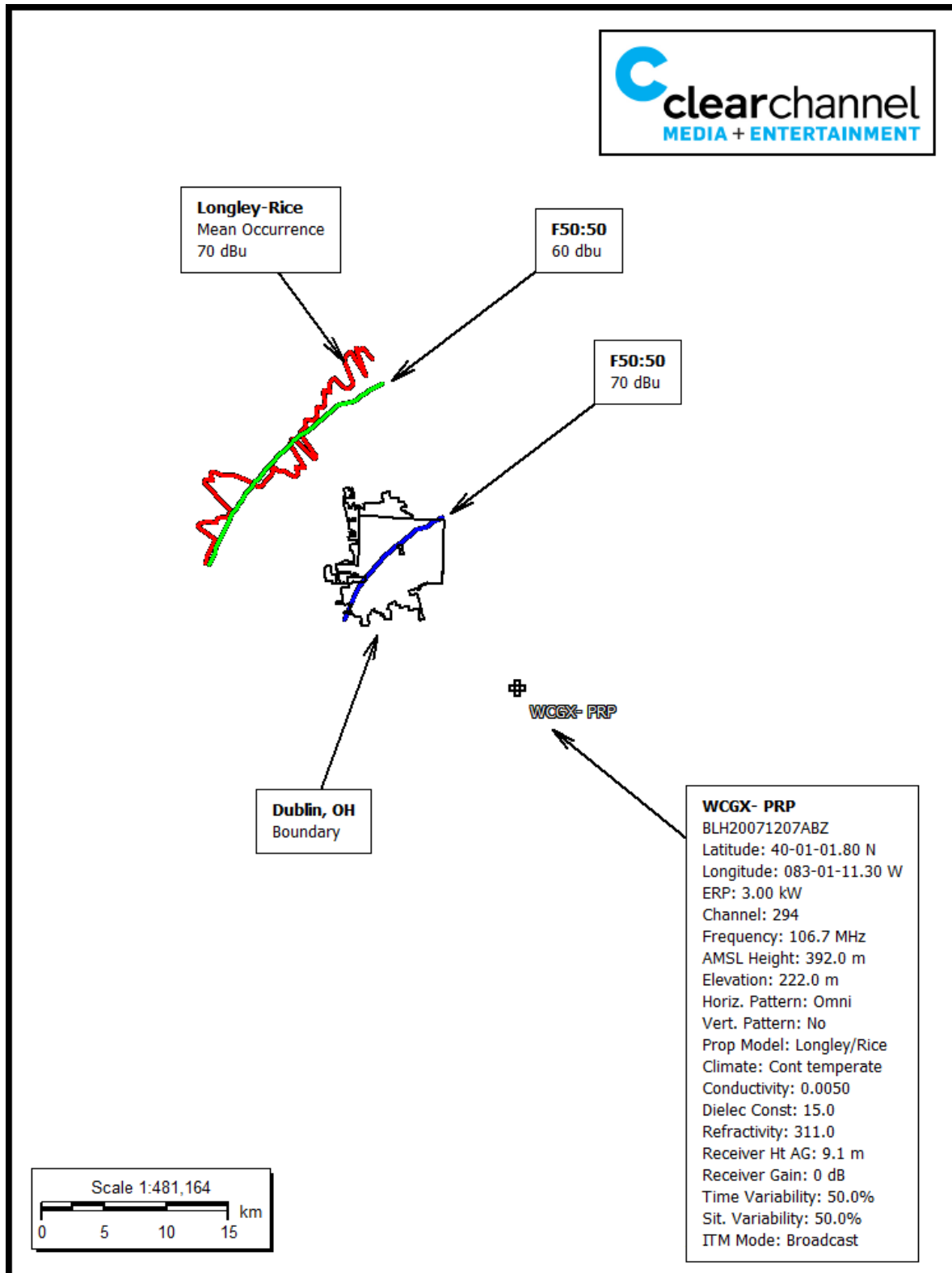


Figure 7 - WCGX Tabulation of Contour Distances

WCGTX Tabulation of Contour Distances, and differences between distances as predicted by the FCC Standard and Alternate (Longley-Rice) Methodologies					
Radial		60 dbu FCC Method	70 dbu FCC Method	70 dbu Longley-Rice Method	
Bearing	HAAT	Distance, km	Distance, km	Distance, km	Change %
292.0	124.9	26.7	15.1	26.7	77%
293.0	125.1	26.7	15.1	26.7	80%
294.0	125.2	26.7	15.1	26.7	80%
295.0	125.4	26.7	15.1	26.7	80%
296.0	125.8	26.8	15.1	26.8	79%
297.0	126.0	26.8	15.1	26.8	91%
298.0	126.3	26.8	15.2	26.8	89%
299.0	126.7	26.9	15.2	26.9	83%
300.0	126.9	26.9	15.2	26.9	82%
301.0	127.3	26.9	15.2	26.9	78%
302.0	127.5	26.9	15.2	26.9	78%
303.0	127.3	26.9	15.2	26.9	92%
304.0	126.9	26.9	15.2	26.9	98%
305.0	127.2	26.9	15.2	26.9	98%
306.0	127.1	26.9	15.2	26.9	92%
307.0	127.1	26.9	15.2	26.9	88%
308.0	127.1	26.9	15.2	26.4	73%
309.0	126.6	26.9	15.2	26.3	73%
310.0	126.4	26.8	15.2	26.3	73%
311.0	126.6	26.9	15.2	26.3	73%
312.0	126.5	26.8	15.2	26.7	76%
313.0	126.5	26.8	15.2	25.8	70%
314.0	126.5	26.8	15.2	24.7	63%
315.0	126.4	26.8	15.2	25.3	67%
316.0	126.4	26.8	15.2	24.7	63%
317.0	126.0	26.8	15.1	26.8	77%
318.0	126.8	26.9	15.2	26.9	78%
319.0	126.9	26.9	15.2	24.7	63%
320.0	125.9	26.8	15.1	26.8	79%
321.0	125.3	26.7	15.1	26.7	80%
322.0	124.9	26.7	15.1	26.7	82%
323.0	125.3	26.7	15.1	26.7	80%
324.0	125.6	26.8	15.1	26.8	83%
325.0	126.3	26.8	15.1	26.8	82%
326.0	127.0	26.9	15.2	26.9	82%

Radial		60 dbu FCC Method	70 dbu FCC Method	70 dbu Longley-Rice Method	
<i>Bearing</i>	<i>HAAT</i>	<i>Distance, km</i>	<i>Distance, km</i>	<i>Distance, km</i>	<i>Change %</i>
327.0	127.7	26.9	15.2	26.9	88%
328.0	127.6	26.9	15.2	26.9	89%
329.0	125.3	26.7	15.1	26.7	92%
330.0	124.2	26.6	15.0	26.6	86%
331.0	124.1	26.6	15.0	26.6	85%
332.0	124.7	26.7	15.1	26.7	98%
333.0	125.3	26.7	15.1	26.7	100%
334.0	126.0	26.8	15.1	26.8	85%
335.0	125.5	26.8	15.1	26.8	98%
336.0	126.0	26.8	15.1	26.8	91%
			Average of Change		84%