

WYKE-FM CHANNEL 282 (104.3 MHz)
MINOR AMENDMENT APPLICATION
INGLIS, FLORIDA
(CITRUS COUNTY ASSOCIATION FOR RETARDED CITIZENS)

KESSLER AND GEHMAN ASSOCIATES, INC.
TELECOMMUNICATIONS CONSULTING ENGINEERS

20111006

Prepared by William T. Godfrey, Jr.

KG&A

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Kessler and Gehman Associates, Inc.

Telecommunications Consulting Engineers

**MINOR AMENDMENT TO A PENDING APPLICATION
FOR COMMERCIAL FM CONSTRUCTION PERMIT
WYKE-FM CHANNEL 282 (104.3 MHz)
INGLIS, FLORIDA**

TABLE OF CONTENTS

- 1) Engineering Technical Statement
- 2) Proposed Engineering Specifications (Exhibit 1)
- 3) Support Structure Profile/Elevation View of Antenna System (Exhibit 2)
- 4) Antenna Azimuth Pattern (Exhibit 3)
- 5) Antenna Azimuth Pattern Tabulation (Exhibit 4)
- 6) Antenna Vertical Pattern (Exhibit 5)
- 7) Antenna Vertical Pattern Tabulation (Exhibit 6)
- 8) USGS 7.5-minute topographic quadrangle map depicting the proposed transmitter location and coordinate lines (Exhibit 7)
- 9) Proposed 3.16 mV/m (70 dBuV/m) Predicted Contour and Radials, Proposed Transmitter Location, & Principal Community Boundary Depiction (Exhibit 8)
- 10) Licensed WYKE-FM 1 mV/m Contour (Green) vs. Proposed WYKE-FM 1 mV/m Contour (Red) – (Exhibit 9)
- 11) Class C3 Determination (Exhibits 10 – 12)
- 12) §73.207 FM Spacing Study (Exhibit 13)
- 13) §73.215 Contour Protection Study (Exhibit 14)
- 14) Suitable Allotment Site Spacing Study (Exhibit 15)
- 15) Suitable Allot, Existing Allot, Prop WYKE-FM & WTKS-FM (Max Class) (Exhibit 16)
- 16) Spacing Study Map – Proposed Site (Exhibit 17)
- 17) 73.215 Showing (Exhibit 18)
- 18) Spacing Study Map – Hypothetical Site (Exhibit 19)
- 19) WYKE-FM F(50,50) 60 dBuV/m 3 Arc Second Terrain (Exhibit 20)
- 20) WYKE-FM F(50,10) 54 dBuV/m 3 Arc Second Terrain (Exhibit 21)
- 21) WTKS-FM F(50,50) 60 dBuV/m 3 Arc Second Terrain (Exhibit 22)
- 22) WTKS-FM F(50,10) 54 dBuV/m 3 Arc Second Terrain (Exhibit 23)
- 23) Population & Area of Gain (Exhibit 24)



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**ENGINEERING TECHNICAL STATEMENT PREPARED BY WILLIAM T. GODFREY, JR.
OF THE FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS
CONSULTING ENGINEERS IN CONNECTION WITH A MINOR AMENDMENT
APPLICATION (BPH-20110812ACP) FOR THE WYKE-FM FM BROADCAST FACILITY
LICENSED TO CITRUS COUNTY ASSOCIATION FOR RETARDED CITIZENS (“CCARC”).**

The firm Kessler and Gehman Associates, Inc. (“KGA”) has been retained by Citrus County Association For Retarded Citizens, Inc. (“CCARC”), Inglis, Florida, to prepare engineering studies and the engineering portion of a minor amendment to a pending application (BPH-20110812ACP) for the WYKE-FM, Channel 282, full-service, commercial FM broadcast facility. This “one-step upgrade” application requests 73.215 processing as well as FCC authorization to make the following changes: 1) modify station class from Class A to Class C3; 2) increase effective radiated power; and 3) change allotment reference point.

Discussion

The FCC accepted CCARC’s minor change in license application (BPH-20110812ACP) for filing on August 15, 2011 and sent a letter (Exhibit 1A) to CCARC on September 21, 2011 stating that an engineering study revealed that the proposed facility failed to meet the minimum spacing requirement of C.F.R. §73.207 because it was short-spaced by 11 km to the 1st-adjacent channel Class C licensed facility (BMLH-20031010ADD) of WTKS-FM, Cocoa Beach, FL. The FCC stated that the prohibited overlap occurs when WTKS-FM is considered as a maximum Class C facility operating with 100 kW ERP at 600 m HAAT as required by 47 C.F.R. §73.215(b)(2)(ii). Accordingly, the FCC stated that the overlap constitutes an acceptance defect and the application must be amended to demonstrate compliance with 73.215 with respect to WTKS-FM’s license BMLH-20031010ADD.

The software used by KGA to calculate and verify the minimum spacing requirements pursuant to §73.207 of the FCC rules is a program called FMCont which is a professional FM



allocation program created by V-Soft Communications. The spacing studies calculated using this program draw from the FCC's set of minimum spacing tables and has a function called "Max Class." When the Max Class function is turned on, the parameters for all applicable FM stations are increased to maximum class facilities pursuant to §73.215(b)(2)(ii) of the FCC rules. KGA always utilizes this function to ensure compliance with all spacing requirements; however, after reviewing the FCC's letter, KGA examined the engineering and determined that the WTKS-FM station's parameters were not increased to the maximum class (100 kW ERP at 600 m HAAT) even though the "Max Class" function was indeed turned on in the program. KGA requested an explanation from V-Soft and received an e-mail from the owner (Exhibit 1B) stating that that the Max Class function in FMCont no longer works and that the program would have to be upgraded to the next generation "FMCommander" software in order to have a working Max Class feature.

The only way to resolve the spacing issue between the WTKS-FM facility at maximum class parameters and the proposed WYKE-FM facility is by utilizing a directional antenna. Accordingly, this amendment application proposes to change from a nondirectional antenna to a directional antenna. The requested modifications in the pending application with respect to changing station class, ERP, allotment reference point, and antenna height are still valid. In summary, CCARC proposes the following changes: 1) Increase station class from the licensed Class A to the proposed Class C3 via the "one-step" upgrade process; 2) Increase ERP from the licensed 4.4 kW to the proposed 19.0 kW; 3) change allotment reference points from Latitude N 29°-02'-45.0" and Longitude W 082°-40'-53.0" to Latitude N 29°-04'-51.0" and Longitude W 082°-47'-27.3"; and 4) Change antenna radiation center AGL from 116.0 m to 113.3 m. Also, CCARC hereby requests contour protection for short-spaced assignments pursuant to §73.215 of the FCC Rules.

Antenna Data

Exhibit 1 provides the operating parameters for the proposed WYKE-FM facility. Exhibit 2 is a profile view of the proposed antenna, support structure and elevations. Exhibits 3



and 4 are the antenna azimuth pattern and azimuth pattern tabulation respectively for the proposed antenna. Exhibits 5 and 6 are the antenna elevation pattern and elevation pattern tabulation respectively for the proposed antenna.

Transmitter Location

The licensed WYKE-FM facility is currently operating on the Shadavrus Capital Trust tower - Antenna Structure Registration Number (ASRN) 1045639. The tower's overall height is 138.7 m AGL. The licensed antenna is an ERI model LPX-4E side-mounted nondirectional antenna with an antenna height radiation center of 116.0 m AGL which equates to 114.7 m AAT. The proposed WYKE-FM facility will operate using a side-mounted directional antenna with an antenna height radiation center of 113.3 m AGL which equates to 112.0 m AAT. Exhibit 7 is a topographic map depicting the proposed WYKE-FM transmitter site.

Principal Community

Exhibit 8 is a principal community map depicting the proposed facility's 3.16 mV/m (70 dBuV/m) contour, boundaries, cardinal radials and a 64.64° radial depiction from the transmitter site through the center point of the principal community of Inglis, Florida. Exhibit 8 demonstrates pictorially that the entire principal community of Inglis, FL will be completely encompassed by the proposed facility's 3.16 mV/m principal community contour.

Exhibit 9 is a contour map depicting the WYKE-FM transmitter site and the licensed facility's F(50,50) 60.0 dBuV/m contour (green) as well as the proposed facility's F(50,50) 60.0 dBuV/m contour (red). It can be seen that the proposed facility will serve a much larger area and population than the licensed facility.

§73.210 & §73.211 – Station Class

Under §73.211, Class C3 FM stations must operate within a minimum ERP of 6 kW, a maximum ERP of 25 kW and a maximum antenna radiation center HAAT of 100 meters,



without exceeding a distance to the class contour of 39 km. The proposed WYKE-FM facility will operate with an ERP of 19.0 kW at an antenna radiation center HAAT of 112.0 m. Since the proposed facility's ERP is greater than the minimum ERP defined in §73.211(a) and the HAAT is greater than the maximum antenna HAAT specified in §73.211(b), the class of the station is determined pursuant to §73.210(b)(3)(i).

Section 73.210(b)(3)(i) of the FCC rules states that an FM station is a Class C3 if the reference distance to its class contour is greater than 28 km and less than or equal to 39 km. Section 73.211(b)(1)(i) states that the reference distance is obtained by finding the predicted distance to the 1 mV/m contour (60 dBu) and then rounding to the nearest km. Exhibit 10 depicts the proposed WYKE-FM facility's reference distance to its class contour in ten degree increments pursuant to Figure 1 of Section 73.333 of the FCC rules. Referring to Exhibit 10, it can be seen that the greatest distance is 39.3 km which rounds to 39 km and therefore, complies with Section 73.210 and 73.211 of the FCC rules. Exhibit 11 depicts the WYKE-FM "Max Class" facility's reference distance to its class contour in ten degree increments pursuant to Figure 1 of Section 73.333 of the FCC rules based on an ERP of 25 kW at an antenna height radiation center of 100 m AAT (Max Class for C3). Exhibit 12 is a formula spreadsheet which subtracts the C3 Max Class distance to contour values (depicted in Exhibit 11) from the proposed WYKE-FM facility's distance to contour values (depicted in Exhibit 10). If any of the proposed WYKE-FM facility's distance to contour values (depicted in Exhibit 10) are greater than the C3 Max Class distance to contour values (depicted in Exhibit 11), the spreadsheet will indicate "FAIL" and if any of the proposed WYKE-FM facility's distance to contour values (depicted in Exhibit 10) are less than or equal to the C3 Max Class distance to contour values (depicted in Exhibit 11), the spreadsheet will indicate "PASS." Referring to Exhibit 12, it can be seen that all 36 azimuths received a "PASS" which means the proposed WYKE-FM facility's distance to contour values (depicted in Exhibit 10) are less than or equal to the C3 Max Class distance to contour values (depicted in Exhibit 11) which demonstrates that the Class C3 threshold was not exceeded in any azimuthal direction. The last column in the formula spreadsheet depicts the difference between the proposed WYKE-FM facility's distance to contour values (depicted in



Exhibit 10) and the C3 Max Class distance to contour values (depicted in Exhibit 11). It can be seen that the proposed WYKE-FM facility's distance to contour values (depicted in Exhibit 10) are less than the C3 Max Class distance to contour values (depicted in Exhibit 11) in all azimuthal directions. Accordingly, it has been demonstrated that the proposed WYKE-FM facility should be classified as a Class C3.

§73.207 & §73.215 Studies – Request to use 3 arc second terrain

Exhibit 13 is a spacing study demonstrating that the proposed WYKE-FM Class C3 facility is separated from all other allotments and assignments on the same channel (co-channel), and five pairs of adjacent channels (200 kHz, 400 kHz, 600 kHz, 10.6 MHz & 10.8 MHz) by not less than the minimum distances specified in §73.207 of the FCC Rules, with exception of the WTKS-FM first-adjacent channel facility which is short-spaced by 10.6 km (also see Exhibit 17). However, based on §73.215 of the FCC Rules, the Commission will accept applications that specify short-spaced antenna locations (locations that do not meet the domestic co-channel and adjacent channel minimum distance separation requirements of §73.207); provided that, such applications propose contour protection with all short-spaced assignments, applications and allotments. Exhibit 14 is an FM interference study which demonstrates that the proposed WYKE-FM Class C3 facility meets all contour protection requirements to all applicable stations, including the licensed WTKS-FM Channel 281 Class C facility¹ at maximum Class C parameters (100 kW ERP at 600 m HAAT).

¹ *Note: Section 73.211(b)(1)(i) of the FCC rules states the following: "The reference distance of a station is obtained by finding the predicted distance to the 1 mV/m contour using Figure 1 of Section 73.333 and then rounding to the nearest kilometer." It was determined that the distance from the WYKE-FM transmitter site to the WTKS-FM transmitter site is 164.9 km which rounds to 165.0 km based on Section 73.211(b)(1)(i). Section 73.215(e) of the FCC rules states that the minimum distance separation requirement for a 1st-adjacent channel Class C3 to C situation is 165.0 km. Therefore, the proposed WYKE-FM Class C3 and licensed WTKS-FM Class C facility's minimum distance separation requirement is met.*



NOTE The interference study depicted in Exhibit 14 was calculated using 3 arc second terrain; therefore, **CCARC respectfully requests that the Commission evaluate interference using 3 arc second terrain.** All 3 arc second terrain data used for this application has been provided as exhibits herein.

§73.215 also states that each application to be processed pursuant to this section must specifically request such processing on its face, and must include the necessary exhibit to demonstrate that the requisite contour protection will be provided. Accordingly, **CCARC hereby specifically requests §73.215 processing** and Exhibit 14 demonstrates that the requisite contour protection is provided. Jumping ahead to Exhibit 24, it can be seen that the public interest will be served since the proposed facility will serve an additional 28,135 persons.² In addition, Exhibit 18 pictorially demonstrates that the proposed WYKE-FM Class C3 facility's protected F(50,50) 60.0 dBuV/m contour (blue) is not overlapped by the WTKS-FM facility's F(50,10) 54.0 dBuV/m predicted interfering contour (red) in any azimuthal direction. Exhibit 14 demonstrates that the proposed WYKE-FM Class C3 facility's F(50,10) 54.0 dBuV/m interfering contour does not overlap the WTKS-FM facility's F(50,50) 60.0 dBuV/m protected contour, at the maximum class for a Class C station (100 kW at 600 m HAAT), in any azimuthal direction (+29.9 km margin). Therefore, this application complies with §73.215 of the FCC Rules.

Suitable Allotment Site (Hypothetical)

The Note to §73.203 states that non-reserved band applications requesting changes in channel and/or class and/or community must meet either the minimum spacing requirements of §73.207 at the site specified in the application, without resort to §73.213 through §73.215, or demonstrate the existence of a suitable allotment site that fully complies with §73.207 and §73.315 without resorting to §73.213 through §73.215. Since this application proposes a change in class and relies on §73.215 to meet the spacing requirements, it must be demonstrated that a suitable allotment site exists that fully complies with §73.207 and §73.315 without resorting to

² Calculated using U.S. Census 2000 data



§73.213 through §73.215. As demonstrated in Exhibits 15, 16 and 19, a suitable allotment site exists that fully complies with §73.207 and §73.315 without resorting to §73.213 through §73.215.

Exhibit 15 depicts the results of a spacing study that was run with the WYKE-FM facility located at the proposed allotment site (hypothetical site). This Exhibit demonstrates that the proposed allotment site is suitable because it is separated from all other allotments and assignments on the same channel (co-channel), and five pairs of adjacent channels (200 kHz, 400 kHz, 600 kHz, 10.6 MHz & 10.8 MHz) by not less than the minimum distances specified in §73.207 of the FCC Rules (also see Exhibit 19). Therefore, the proposed hypothetical allotment site fully complies with §73.207 without resorting to §73.213 through §73.215.

Exhibit 16 is a contour map demonstrating that the designated WYKE-FM Class C3 suitable allotment facility's F(50,50) 70 dBuV/m contour (3.16 mV/m) will fully encompass the principle community of Inglis, FL. Therefore, the allotment site (hypothetical site) at Latitude N 29°-04'-51.0" and Longitude W 082°-47'-27.3" is a suitable site since it fully complies with §73.207 and §73.315 without resorting to §73.213 through §73.215 of the FCC Rules.

Exhibit 20 depicts the 3 arc second terrain data used to calculate the proposed WYKE-FM F(50,50) 60.0 dBuV/m contour and Exhibit 21 depicts the 3 arc second terrain data used to calculate the proposed WYKE-FM F(50,10) 54.0 dBuV/m interfering contour. Exhibit 22 depicts the 3 arc second terrain data used to calculate the licensed WTKS-FM F(50,50) 60.0 dBuV/m contour (at max class: 100 kW ERP & 600 m HAAT) and Exhibit 23 depicts the 3 arc second terrain data used to calculate the licensed WTKS-FM F(50,10) 54.0 dBuV/m interfering contour (at max class: 100 kW ERP & 600 m HAAT).

Area and population Analysis

The population counts within the licensed and proposed 1 mV/m contours (60.0 dBuV/m) were determined using U.S. Census 2000 data. The area and population gain within the



proposed WYKE-FM 1 mV/m contour is predicted to be 1,889.28 sq km (4,363.64 sq km – 2,474.36 sq km) and 28,135 persons (94,610 – 66,475) respectively (Exhibit 24). There will be no area or population loss. The percentage of area increase is 76.4% and the percentage of population increase is 42.3%. Therefore, the proposed WYKE-FM facility will serve the public interest by significantly increasing coverage to an area and population that is currently unable to receive services provided by the WYKE-FM facility.

Intermediate Frequency Interference (53rd & 54th Adjacent Channels)

The proposed WYKE-FM site will meet all separation requirements pertaining to intermediate frequency (“IF”) interference. The station with the least geographic spacing margin with respect to distance from the proposed WYKE-FM transmitter site is (282-53=229 & 282-54=228) the licensed WOGK-FM Channel 229 Class C0 facility located approximately 65.2 km from the proposed WYKE-FM transmitter site in Ocala, FL at North Latitude 29° 16’ 05” and West Longitude 82° 04’ 51” where a separation of 26.5 km is required; therefore, the distance is easily met with a margin of 38.7 km.

FM Blanketing Interference

Blanketing is defined as interference to the reception of other broadcast stations which is caused by the presence of an FM broadcast signal of 115 dBu (562.3 mV/m) or greater signal strength in the area adjacent to the antenna of the transmitting station. The 115 dBu contour is referred to as the blanketing contour and the area within this contour is referred to as the blanketing area. The proposed WYKE-FM Channel 282 blanketing contour extends 1.61 km from its transmitter and it is understood that CCARC must assume full financial responsibility for remedying any new complaints of blanketing interference for a period of one year to all broadcast stations within the proposed WYKE-FM blanketing contour.



Environmental Impact

The proposed WYKE-FM Channel 282 Class C3 facility will have no significant environmental impact as defined in §1.1307 of the FCC Rules. The FM transmitter, transmission line and antenna system will produce a maximum ERP of 19.0 kW (c-pol). It was determined that the maximum lobe of radiation from the base of the tower will occur at approximately 155.2 feet from the base of the tower (397.3 ft radial distance from the antenna center). At approximately 155.2 feet from the base of the tower, the depression angle of the main lobe is approximately 67° below the horizontal. At that point, the relative field is 0.323 and the power density six feet above the ground is approximately 0.00903 mW/cm². This equates to only 0.90% of the Maximum Permissible Exposure (“MPE”) limits for Occupational/Controlled Exposure and only 4.52% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (“ANSI”). Since operation of the proposed WYKE-FM Channel 282 facility will not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground, the proposed facility is not considered a “significant contributor” to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for in this analysis. It is safe to conclude that the emissions would be insignificant and well within the maximum allowable requirements.

If other antennas are placed on the tower in the future, the licensee will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from the electromagnetic radiation emanating from the antenna. It is also understood that additional antennas on the support structure could increase the overall RF exposure levels and it is the responsibility of each licensee to ensure that the total RF exposure resulting from the operation of all antennas on the support structure do not exceed the maximum permissible exposure level at any point on the ground.



Kessler and Gehman Associates, Inc.

Telecommunications Consulting Engineers

Certification

This technical statement was prepared by William T. Godfrey, Jr., Telecommunications Technical Consultant with Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and has been working in the field of radio and television broadcast consulting since 1998. William graduated in 1993 as a Distinguished Military Graduate from the University of Florida with a Bachelor of Arts degree in Criminal Justice and a minor in Mathematics from the University of North Florida. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.



KESSLER AND GEHMAN ASSOCIATES, INC.

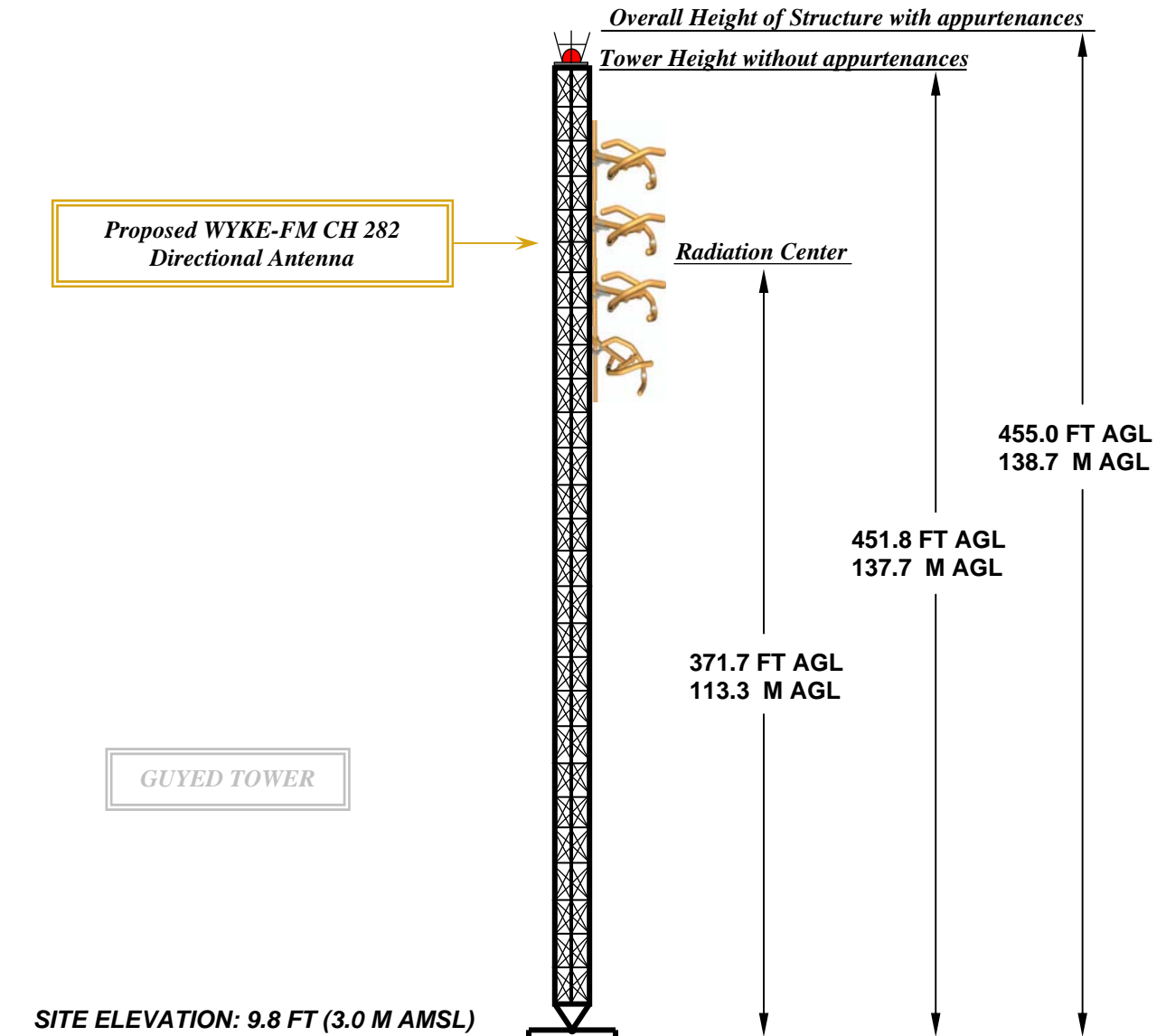

WILLIAM T. GODFREY, JR.
Telecommunications Technical Consultant

6 October, 2011

Inglis, Florida

EXHIBIT 1

PROPOSED WYKE-FM ELEVATION VIEW



OVERALL HEIGHT AGL: 138.7 M
OVERALL HEIGHT AMSL: 141.7 M
RADIATION CENTER AGL: 113.3 M
RADIATION CENTER AMSL: 116.3 M
RADIATION CENTER HAAT: 112.0 M
AVG OF ALL NON-ODD RADIALS: 4.3 M
SITE HAAT: -1.3 M

COORDINATES (NAD 27):
N. LATITUDE 29° 01' 18"
W. LONGITUDE 82° 41' 20"
Antenna Structure Registration Number:
1045639

NOTE: NOT TO SCALE

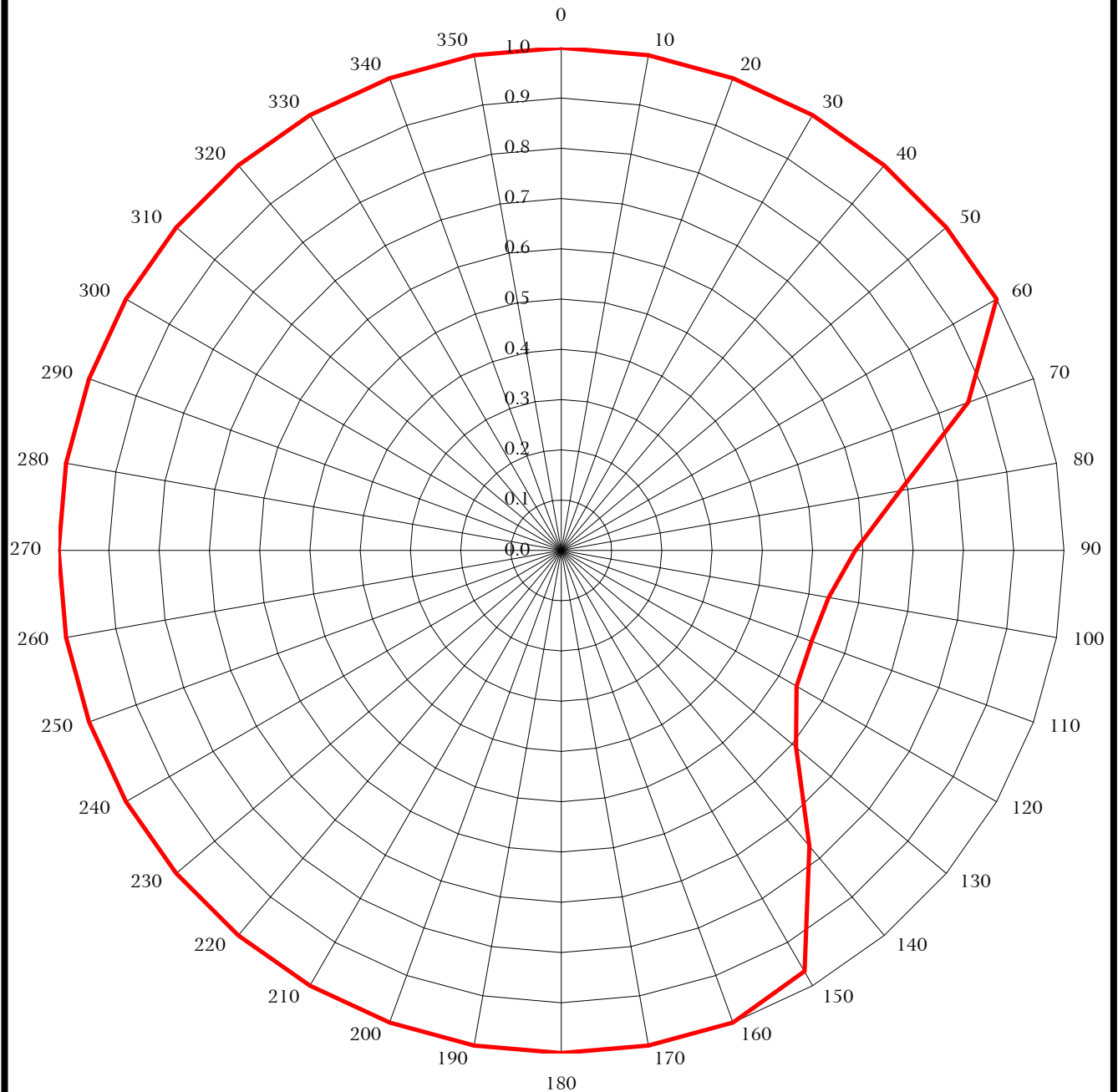
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WYKE-FM CH 282 (104.3 MHz)
Inglis, Florida

20111004

EXHIBIT 2

RELATIVE FIELD AZIMUTH PATTERN



Additional Azimuths:

085° = 0.620

095° = 0.555

105° = 0.530

115° = 0.525

**PROPOSED AZIMUTH PATTERN
DIRECTIONAL ANTENNA
CIRCULAR POLARIZATION
CALCULATED PATTERN**

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507 N.W. 60th Street, Suite C
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WYKE-FM CHANNEL 282
Inglis, Florida

20111004

EXHIBIT 3

WYKE-FM CHANNEL 282

Inglis, Florida

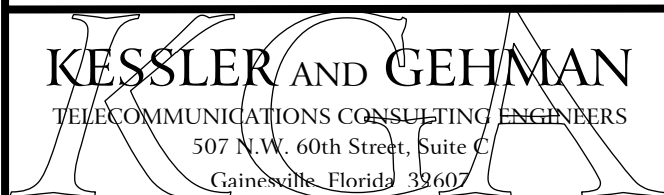
TABULATION OF RELATIVE FIELD FOR DIRECTIONAL ANTENNA

<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>	<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>
N000°E	1.000	N180°E	1.000
N010°E	1.000	N190°E	1.000
N020°E	1.000	N200°E	1.000
N030°E	1.000	N210°E	1.000
N040°E	1.000	N220°E	1.000
N050°E	1.000	N230°E	1.000
N060°E	1.000	N240°E	1.000
N070°E	0.862	N250°E	1.000
N080°E	0.685	N260°E	1.000
N090°E	0.585	N270°E	1.000
N100°E	0.540	N280°E	1.000
N110°E	0.530	N290°E	1.000
N120°E	0.540	N300°E	1.000
N130°E	0.610	N310°E	1.000
N140°E	0.768	N320°E	1.000
N150°E	0.967	N330°E	1.000
N160°E	1.000	N340°E	1.000
N170°E	1.000	N350°E	1.000

MAXIMUM RELATIVE FIELD OF 1.000

MINIMUM RELATIVE FIELD OF 0.525 AT N115°E

ADDITIONAL AZIMUTHS: 085° = 0.620; 095° = 0.555; 105° = 0.530; 115° = 0.525



WYKE-FM CHANNEL 282
Inglis, Florida

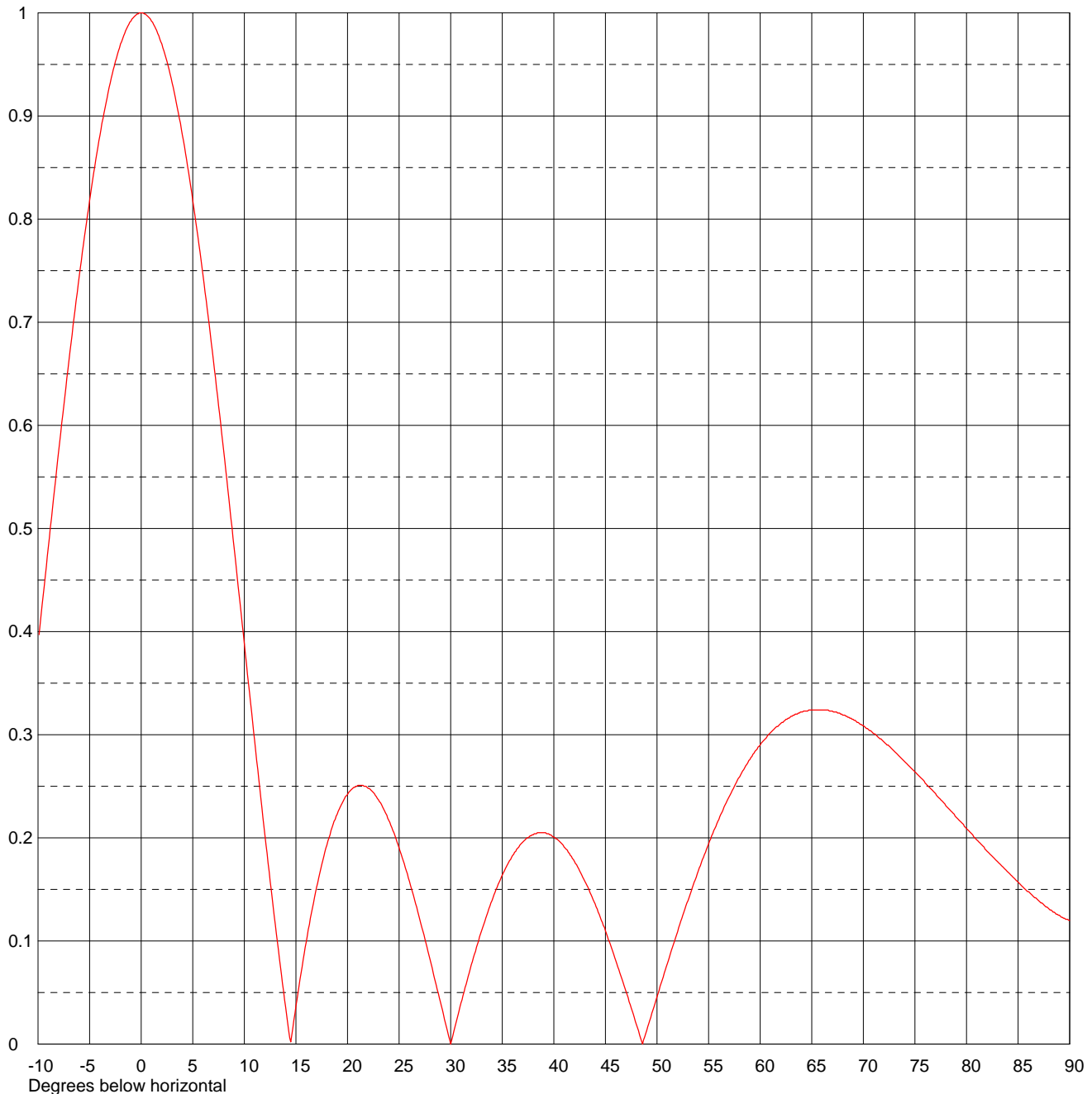
20111004

EXHIBIT 4

Date	04 Oct 2011	
Call Letters	WYKE-FM	Channel 282
Location	Inglis, FL	
Customer	CCARC	
Antenna Type		

ELEVATION PATTERN

RMS Gain at Main Lobe	2.1 (3.22 dB)	Beam Tilt	0.00 Degrees
RMS Gain at Horizontal	2.1 (3.22 dB)	Frequency	104.30 MHz
Calculated / Measured	Calculated	Drawing #	FE04C1000042000-90



Remarks:

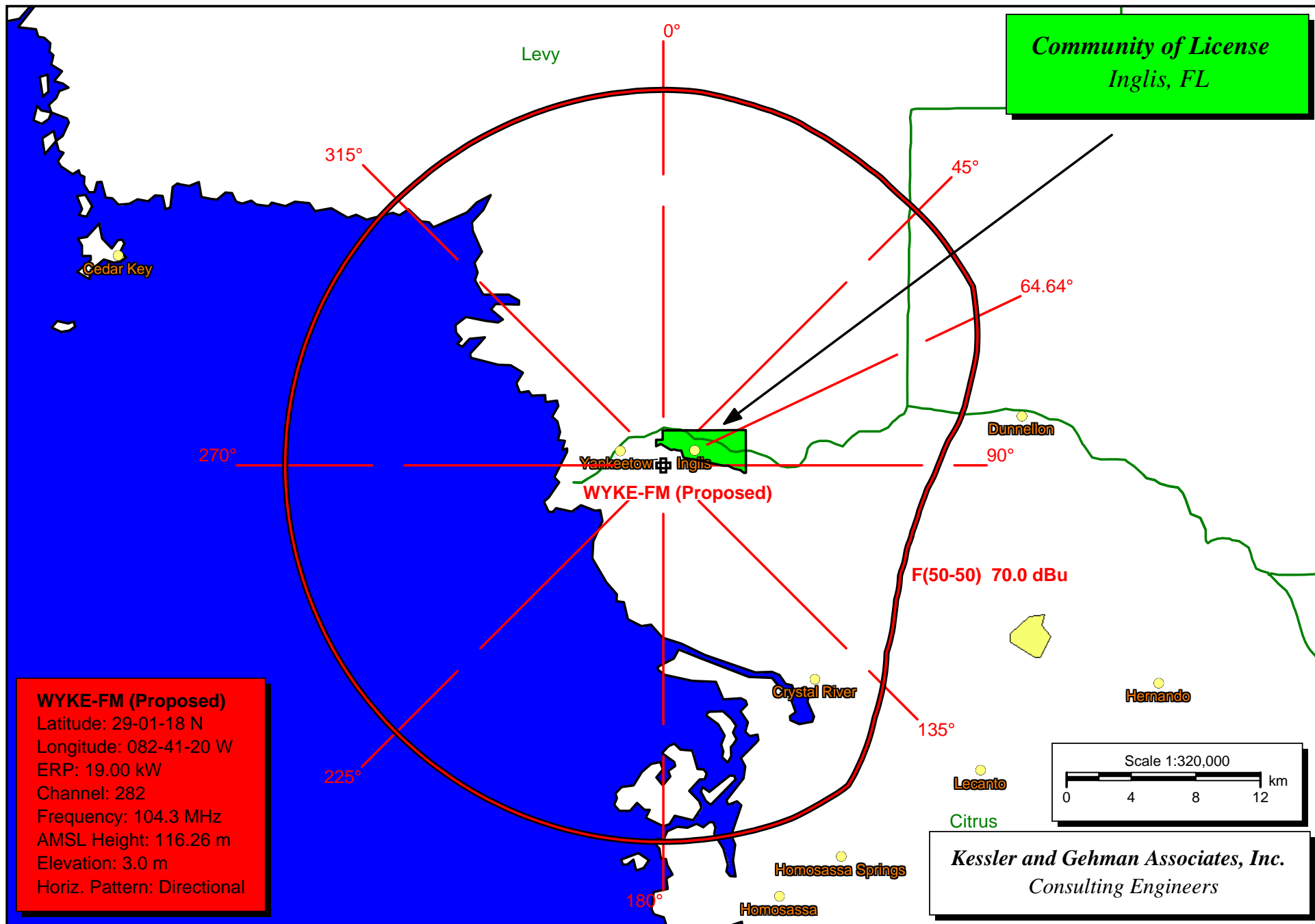
Date **04 Oct 2011**
 Call Letters **WYKE-FM** Channel **282**
 Location **Inglis, FL**
 Customer **CCARC**
 Antenna Type

TABULATION OF ELEVATION PATTERN

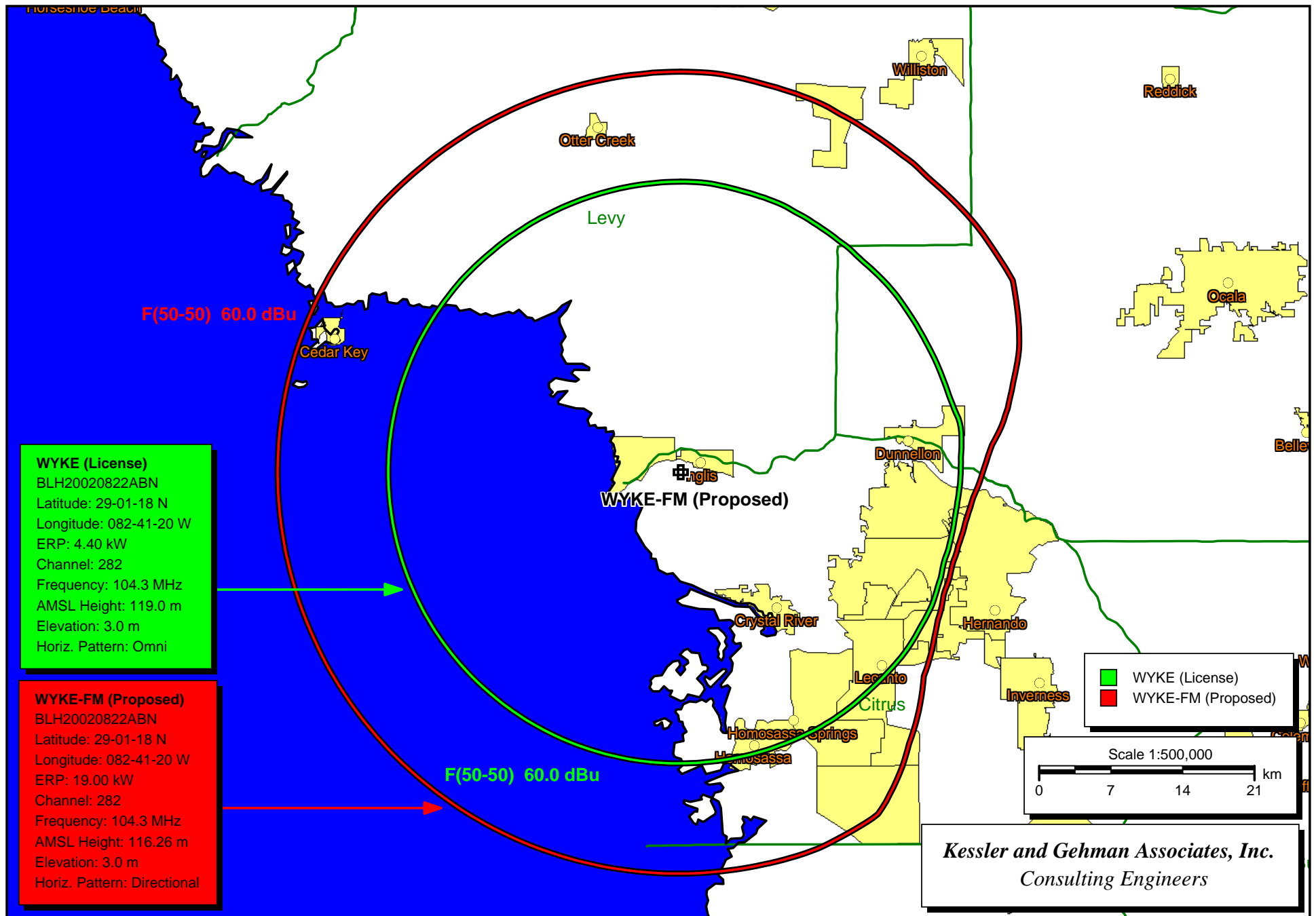
Elevation Pattern Drawing # **FE04C1000042000-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.388	2.4	0.956	10.6	0.331	30.5	0.020	51.0	0.078	71.5	0.297
-9.5	0.435	2.6	0.949	10.8	0.312	31.0	0.040	51.5	0.094	72.0	0.293
-9.0	0.482	2.8	0.941	11.0	0.294	31.5	0.058	52.0	0.109	72.5	0.289
-8.5	0.529	3.0	0.932	11.5	0.248	32.0	0.077	52.5	0.125	73.0	0.284
-8.0	0.575	3.2	0.923	12.0	0.202	32.5	0.094	53.0	0.139	73.5	0.279
-7.5	0.619	3.4	0.913	12.5	0.158	33.0	0.110	53.5	0.154	74.0	0.274
-7.0	0.663	3.6	0.903	13.0	0.116	33.5	0.125	54.0	0.168	74.5	0.269
-6.5	0.705	3.8	0.893	13.5	0.075	34.0	0.139	54.5	0.181	75.0	0.264
-6.0	0.745	4.0	0.881	14.0	0.036	34.5	0.152	55.0	0.194	75.5	0.259
-5.5	0.783	4.2	0.870	14.5	0.002	35.0	0.164	55.5	0.207	76.0	0.253
-5.0	0.818	4.4	0.858	15.0	0.037	35.5	0.174	56.0	0.218	76.5	0.248
-4.5	0.851	4.6	0.845	15.5	0.069	36.0	0.183	56.5	0.230	77.0	0.243
-4.0	0.881	4.8	0.832	16.0	0.099	36.5	0.190	57.0	0.240	77.5	0.237
-3.5	0.908	5.0	0.818	16.5	0.127	37.0	0.196	57.5	0.250	78.0	0.231
-3.0	0.932	5.2	0.804	17.0	0.152	37.5	0.200	58.0	0.259	78.5	0.226
-2.8	0.941	5.4	0.790	17.5	0.174	38.0	0.203	58.5	0.268	79.0	0.220
-2.6	0.949	5.6	0.775	18.0	0.193	38.5	0.205	59.0	0.276	79.5	0.215
-2.4	0.956	5.8	0.760	18.5	0.210	39.0	0.205	59.5	0.284	80.0	0.209
-2.2	0.963	6.0	0.745	19.0	0.223	39.5	0.204	60.0	0.290	80.5	0.204
-2.0	0.970	6.2	0.729	19.5	0.234	40.0	0.201	60.5	0.296	81.0	0.198
-1.8	0.975	6.4	0.713	20.0	0.242	40.5	0.197	61.0	0.302	81.5	0.193
-1.6	0.980	6.6	0.697	20.5	0.248	41.0	0.191	61.5	0.307	82.0	0.187
-1.4	0.985	6.8	0.680	21.0	0.251	41.5	0.185	62.0	0.311	82.5	0.182
-1.2	0.989	7.0	0.663	21.5	0.251	42.0	0.177	62.5	0.315	83.0	0.177
-1.0	0.992	7.2	0.646	22.0	0.248	42.5	0.168	63.0	0.318	83.5	0.172
-0.8	0.995	7.4	0.628	22.5	0.244	43.0	0.158	63.5	0.320	84.0	0.167
-0.6	0.997	7.6	0.611	23.0	0.237	43.5	0.147	64.0	0.322	84.5	0.162
-0.4	0.999	7.8	0.593	23.5	0.228	44.0	0.136	64.5	0.323	85.0	0.157
-0.2	1.000	8.0	0.575	24.0	0.217	44.5	0.123	65.0	0.324	85.5	0.152
0.0	1.000	8.2	0.556	24.5	0.205	45.0	0.110	65.5	0.324	86.0	0.148
0.2	1.000	8.4	0.538	25.0	0.190	45.5	0.096	66.0	0.324	86.5	0.143
0.4	0.999	8.6	0.519	25.5	0.175	46.0	0.081	66.5	0.324	87.0	0.139
0.6	0.997	8.8	0.501	26.0	0.158	46.5	0.066	67.0	0.323	87.5	0.135
0.8	0.995	9.0	0.482	26.5	0.140	47.0	0.051	67.5	0.321	88.0	0.131
1.0	0.992	9.2	0.463	27.0	0.121	47.5	0.035	68.0	0.319	88.5	0.128
1.2	0.989	9.4	0.444	27.5	0.102	48.0	0.019	68.5	0.317	89.0	0.125
1.4	0.985	9.6	0.426	28.0	0.082	48.5	0.003	69.0	0.315	89.5	0.122
1.6	0.980	9.8	0.407	28.5	0.061	49.0	0.013	69.5	0.312	90.0	0.120
1.8	0.975	10.0	0.388	29.0	0.041	49.5	0.030	70.0	0.309		
2.0	0.970	10.2	0.369	29.5	0.020	50.0	0.046	70.5	0.305		
2.2	0.963	10.4	0.350	30.0	0.000	50.5	0.062	71.0	0.301		

Remarks:



Proposed WYKE-FM F(50,50) 70 dBuV/m Contour



Licensed WYKE-FM 1 mV/m Contour (Green) vs. Proposed WYKE-FM 1 mV/m Contour (Red)

Proposed WYKE-FM Distance to Contour (Class C3 Determination)

Call Letters: WYKE-FM (Proposed)

Latitude: 29-01-18 N

Longitude: 082-41-20 W

ERP: 19.00 kW

Channel: 282

Frequency: 104.3 MHz

AMSL Height: 116.26 m

Elevation: 3.0 m

HAAT: 112.0 m

Horiz. Antenna Pattern: Directional

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 50.0 %

of Radials Calculated: 360

Field Strength: 60.00 dBuV/m

Primary Terrain: 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
0.0	39.0	114.2
10.0	38.8	112.4
20.0	38.5	110.2
30.0	37.9	106.3
40.0	37.5	103.8
50.0	37.5	103.9
60.0	37.4	102.9
70.0	35.1	103.4
80.0	32.1	107.6
90.0	29.4	104.7
100.0	28.2	103.0
110.0	28.0	103.8
120.0	28.9	109.0
130.0	30.9	111.6
140.0	34.6	112.4
150.0	38.5	114.0
160.0	39.1	114.3
170.0	39.1	114.7
180.0	39.1	114.9
190.0	39.2	115.2
200.0	39.2	115.3
210.0	39.2	115.5
220.0	39.2	115.6
230.0	39.2	115.7
240.0	39.3	115.9
250.0	39.3	115.9
260.0	39.3	115.9
270.0	39.3	116.0
280.0	39.3	116.0
290.0	39.3	115.8
300.0	39.2	115.5
310.0	39.2	115.1
320.0	39.0	114.1
330.0	39.0	113.9
340.0	39.0	113.8
350.0	39.0	114.0

C3 MAX CLASS Distance to Contour (Class C3 Determination)

Call Letters: C3 MAX Class

Latitude: 29-01-18 N

Longitude: 082-41-20 W

ERP: 25.00 kW

Channel: 282

Frequency: 104.3 MHz

AMSL Height: 104.26 m

Elevation: 3.0 m

HAAT: 100.0 m

Horiz. Antenna Pattern: Directional

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 50.0 %

of Radials Calculated: 360

Field Strength: 60.00 dBuV/m

Primary Terrain: 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
0.0	39.4	102.2
10.0	39.2	100.4
20.0	38.8	98.2
30.0	38.1	94.3
40.0	37.7	91.8
50.0	37.7	91.9
60.0	37.5	90.9
70.0	35.2	91.4
80.0	32.4	95.6
90.0	29.6	92.7
100.0	28.3	91.0
110.0	28.1	91.8
120.0	29.1	97.0
130.0	31.2	99.6
140.0	35.0	100.4
150.0	38.9	102.0
160.0	39.5	102.3
170.0	39.5	102.7
180.0	39.5	102.9
190.0	39.6	103.2
200.0	39.6	103.3
210.0	39.7	103.5
220.0	39.7	103.6
230.0	39.7	103.7
240.0	39.7	103.9
250.0	39.7	103.9
260.0	39.7	103.9
270.0	39.7	104.0
280.0	39.7	104.0
290.0	39.7	103.8
300.0	39.6	103.5
310.0	39.6	103.1
320.0	39.4	102.1
330.0	39.4	101.9
340.0	39.4	101.8
350.0	39.4	102.0

Class C3 Verification Calculation

Radial (degrees)	WYKE-FM Proposed (km)	C3 Max Class (km)	Pass/Fail	Difference (km)
0	39.0	39.4	PASS	-0.4
10	38.8	39.2	PASS	-0.4
20	38.5	38.8	PASS	-0.3
30	37.9	38.1	PASS	-0.2
40	37.5	37.7	PASS	-0.2
50	37.5	37.7	PASS	-0.2
60	37.4	37.5	PASS	-0.1
70	35.1	35.2	PASS	-0.1
80	32.1	32.4	PASS	-0.3
90	29.4	29.6	PASS	-0.2
100	28.2	28.3	PASS	-0.1
110	28.0	28.1	PASS	-0.1
120	28.9	29.1	PASS	-0.2
130	30.9	31.2	PASS	-0.3
140	34.6	35.0	PASS	-0.4
150	38.5	38.9	PASS	-0.4
160	39.1	39.5	PASS	-0.4
170	39.1	39.5	PASS	-0.4
180	39.1	39.5	PASS	-0.4
190	39.2	39.6	PASS	-0.4
200	39.2	39.6	PASS	-0.4
210	39.2	39.7	PASS	-0.5
220	39.2	39.7	PASS	-0.5
230	39.2	39.7	PASS	-0.5
240	39.3	39.7	PASS	-0.4
250	39.3	39.7	PASS	-0.4
260	39.3	39.7	PASS	-0.4
270	39.3	39.7	PASS	-0.4
280	39.3	39.7	PASS	-0.4
290	39.3	39.7	PASS	-0.4
300	39.2	39.6	PASS	-0.4
310	39.2	39.6	PASS	-0.4
320	39.0	39.4	PASS	-0.4
330	39.0	39.4	PASS	-0.4
340	39.0	39.4	PASS	-0.4
350	39.0	39.4	PASS	-0.4

***C3 MAX Class: 25 kW ERP & 100 m Antenna Height Above Average Terrain (HAAT)**

Kessler and Gehman Associates, Inc.
Telecommunications Consulting Engineers
73.207 Minimum Distance Separation Between Stations
WYKE-FM Channel 282 (104.3 MHz)

REFERENCE		DISPLAY DATES
29 01 18.0 N.	CLASS = C3	DATA 10-05-11
82 41 20.0 W.	Current Spacings to 3rd Adj.	SEARCH 10-05-11
----- Channel 282 - 104.3 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
WYKE	APP-N 282C3	Inglis	FL 0.0	0.0	152.5	-152.5
One Step Application						
WYKE	LIC 282A	Inglis	FL 0.0	0.0	141.5	-141.5
WYKE	RSV-A 282C3	Inglis	FL 303.6	11.9	152.5	-140.6
One Step Application						
ALLO	USE 282A	Inglis	FL 15.2	2.8	141.5	-138.7
WTKS-FM	LIC 281C	Cocoa Beach	FL 106.9	164.9	175.5	-10.6
ALLO	USE 281C	Cocoa Beach	FL 106.9	164.9	175.5	-10.6
Coordinates updated from LIC record BLH850508KC						
ALLO	USE 283C	Atlantic Beach	FL 37.6	176.6	175.5	1.1
Coordinates updated from LIC record BLH880427KA						
WFYV-FM	LIC 283C	Atlantic Beach	FL 37.6	176.6	175.5	1.1
ALLO	USE 279C1	Gainesville	FL 20.4	81.4	75.5	5.9
Coordinates updated from LIC record BLH850820KL						
WRUF-FM	LIC 279C1	Gainesville	FL 20.4	81.4	75.5	5.9
ALLO	USE 229C	Ocala	FL 66.3	60.2	30.5	29.7
Coordinates updated from LIC record BLH860512KC						
WOGK	LIC 229C0	Ocala	FL 65.0	65.2	26.5	38.7
AL9905	USE 229C0	Ocala	FL 64.9	65.2	26.5	38.7
WGLF	LIC 281C0	Tallahassee	FL 321.5	203.7	162.5	41.2
WKZM	CP -N 282C3	Sarasota	FL 174.0	194.6	152.5	42.1
One Step Application						
ALLO	USE 282C3	Sarasota	FL 174.9	197.5	152.5	45.0
One Step Application						
ALLO	USE 284C1	Tampa	FL 169.3	121.2	75.5	45.7
ALLO	USE 285A	High Springs	FL 7.1	89.3	41.5	47.8
Coordinates updated from LIC record BLH850429LP						
WYGC	LIC 285A	High Springs	FL 7.1	89.3	41.5	47.8
WRBQ-FM	LIC-N 284C1	Tampa	FL 166.9	124.0	75.5	48.5
WKZM	LIC 282A	Sarasota	FL 174.0	194.6	141.5	53.1
ALLO	USE 281C0	Tallahassee	FL 316.5	216.7	162.5	54.2
Coordinates updated from LIC record BLH800407AB						

RSV-R = reserved and needs protection, RSV-A = allocation

Kessler and Gehman Associates, Inc.
Telecommunications Consulting Engineers

73.215 Contour Protection Study (For Short-Spaced Assignments)

REFERENCE		CH#	WYKE-FM Channel 282 (104.3 MHz)					COR=	DISPLAY DATES		
29 01 18.0 N.		282C3 - 104.3	MHz, Pwr= 19 kW DA, HAAT= 112.0 M,					116.3 M	DATA 10-05-11		
82 41 20.0 W.			Average Protected F(50-50)= 38.73 km						SEARCH 10-05-11		
			Standard Directional								
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG	HAAT (M)	COR(M)	LICENSEE	(Overlap in km)	
282C3	WYKE	APP	NCX	0.0	0.0	29 01 18.0	16.900	107.7	38.5	141.5R	-141.5M
Ingليس		FL		0.0	BPH20110812ACP	82 41 20.0	115	119	Citrus County Association		
One Step Application											
282C3	WYKE	RSV-A	---	303.6	11.9	29 04 51.0	25.000	113.4	38.8	141.5R	-129.6M
Ingليس		FL		123.6		82 47 27.0	100	101	Citrus County Association		
One Step Application											
282A	WYKE	LIC	_CX	0.0	0.0	29 01 18.0	4.400	84.7	28.3	118.5R	-118.5M
Ingليس		FL		0.0	BLH20020822ABN	82 41 20.0	116	119	Citrus County Association		
282A	ALLO	USE	---	15.2	2.8	29 02 45.0	6.000	87.2	28.8	118.5R	-115.7M
Ingليس		FL		195.2		82 40 53.0	100	105			
281C	WTKS-FM^	LIC	_C_	106.9	164.9	28 34 51.0	100.000	136.5	91.7	0.4	29.9
Cocoa Beach		FL		287.7	BMLH20031010ADD	81 04 32.0	600	613	Clear Channel Broadcasting		
281C	ALLO	USE	---	106.9	164.9	28 34 51.0	100.000	136.4	91.7	0.5	30.0
Cocoa Beach		FL		287.7		81 04 32.0	600	612			
Coordinates updated from LIC record BLH850508KC											
283C	ALLO«	USE	---	37.6	176.6	30 16 34.0	100.000	136.7	91.9	175.5R	1.1M
Atlantic Beach		FL		218.2		81 33 53.0	600	606			
Coordinates updated from LIC record BLH880427KA											
283C	WFYV-FM«	LIC	_CY	37.6	176.6	30 16 34.0	100.000	106.3	73.3	175.5R	1.1M
Atlantic Beach		FL		218.2	BLH19940816KD	81 33 53.0	309	315	Cox Radio, Inc.		
279C1	ALLO«	USE	---	20.4	81.4	29 42 34.0	100.000	10.3	73.1	75.5R	5.9M
Gainesville		FL		200.5		82 23 40.0	299	338			
Coordinates updated from LIC record BLH850820KL											
279C1	WRUF-FM«	LIC	_CN	20.4	81.4	29 42 34.0	100.000	9.2	68.0	75.5R	5.9M
Gainesville		FL		200.5	BLH19850820KL	82 23 40.0	234	275	The University Of Florida		
229C	ALLO«	USE	---	66.3	60.2	29 14 17.0	100.000	12.8	58.8	30.5R	29.7M
Ocala		FL		246.6		82 07 17.0	600	626			
Coordinates updated from LIC record BLH860512KC											
229C0	WOGK«	LIC	_CN	65.0	65.2	29 16 05.0	100.000	12.8	58.8	26.5R	38.7M
Ocala		FL		245.3	BLH19870915KA	82 04 51.0	411	430	Ocala Broadcasting Corpora		
229C0	AL9905«	USE	---	64.9	65.2	29 16 06.0	100.000	12.8	58.8	26.5R	38.7M
Ocala		FL		245.2	RM10365	82 04 51.0	450	471			
281C0	WGLF«	LIC	_C_	321.5	203.7	30 27 04.0	100.000	120.8	81.4	162.5R	41.2M
Tallahassee		FL		140.9	BLH20081022ACG	84 00 42.0	430	459	Cumulus Licensing Lic		
282C3	WKZM«	CP	NCX	174.0	194.6	27 16 30.0	25.000	109.6	34.9	152.5R	42.1M
Sarasota		FL		354.1	BPED20101206ACG	82 28 54.0	81	84	The Moody Bible Institute		
One Step Application											
282C3	ALLO«	USE	---	174.9	197.5	27 14 47.0	25.000	113.0	38.4	152.5R	45.0M
Sarasota		FL		354.9		82 30 34.0	100	103			
One Step Application											
284C1	ALLO«	USE	---	169.3	121.2	27 56 50.0	100.000	10.1	72.0	75.5R	45.7M
Tampa		FL		349.4		82 27 35.0	299	304			
285A	ALLO«	USE	---	7.1	89.3	29 49 16.0	6.000	2.8	28.5	41.5R	47.8M
High Springs		FL		187.1		82 34 28.0	100	128			
Coordinates updated from LIC record BLH850429LP											
285A	WYGC«	LIC	_CX	7.1	89.3	29 49 16.0	3.200	2.6	28.1	41.5R	47.8M
High Springs		FL		187.2	BLH20020306ABA	82 34 25.0	137	163	Asterisk Communications, I		
284C1	WRBQ-FM«	LIC	NC_	166.9	124.0	27 55 53.8	100.000	7.6	60.9	75.5R	48.5M
Tampa		FL		347.0	BLH20100122AAR	82 24 04.6	174	181	Cbs Radio Stations Inc.		
282A	WKZM«	LIC	_CN	174.0	194.6	27 16 30.0	6.000	80.6	23.6	141.5R	53.1M
Sarasota		FL		354.1	BLED20010226AAC	82 28 54.0	81	74	The Moody Bible Institute		
281C0	ALLO«	USE	---	316.5	216.7	30 25 38.0	100.000	124.8	83.9	162.5R	54.2M
Tallahassee		FL		135.7		84 14 43.0	450	478			
Coordinates updated from LIC record BLH800407AB											

CH
CITY
CALL
TYPE
STATE
ANT
AZI
<--
DIST
FILE #
LAT
LNG
PWR(kW)
HAAT(M)
INT(km)
COR(M)
PRO(km)
LICENSEE

Page # 2
IN
OUT

(Overlap in km)

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
***affixed to 'IN' or 'OUT' values = site inside protected contour.
« = Station meets FCC minimum distance spacing for its class.
^ = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements

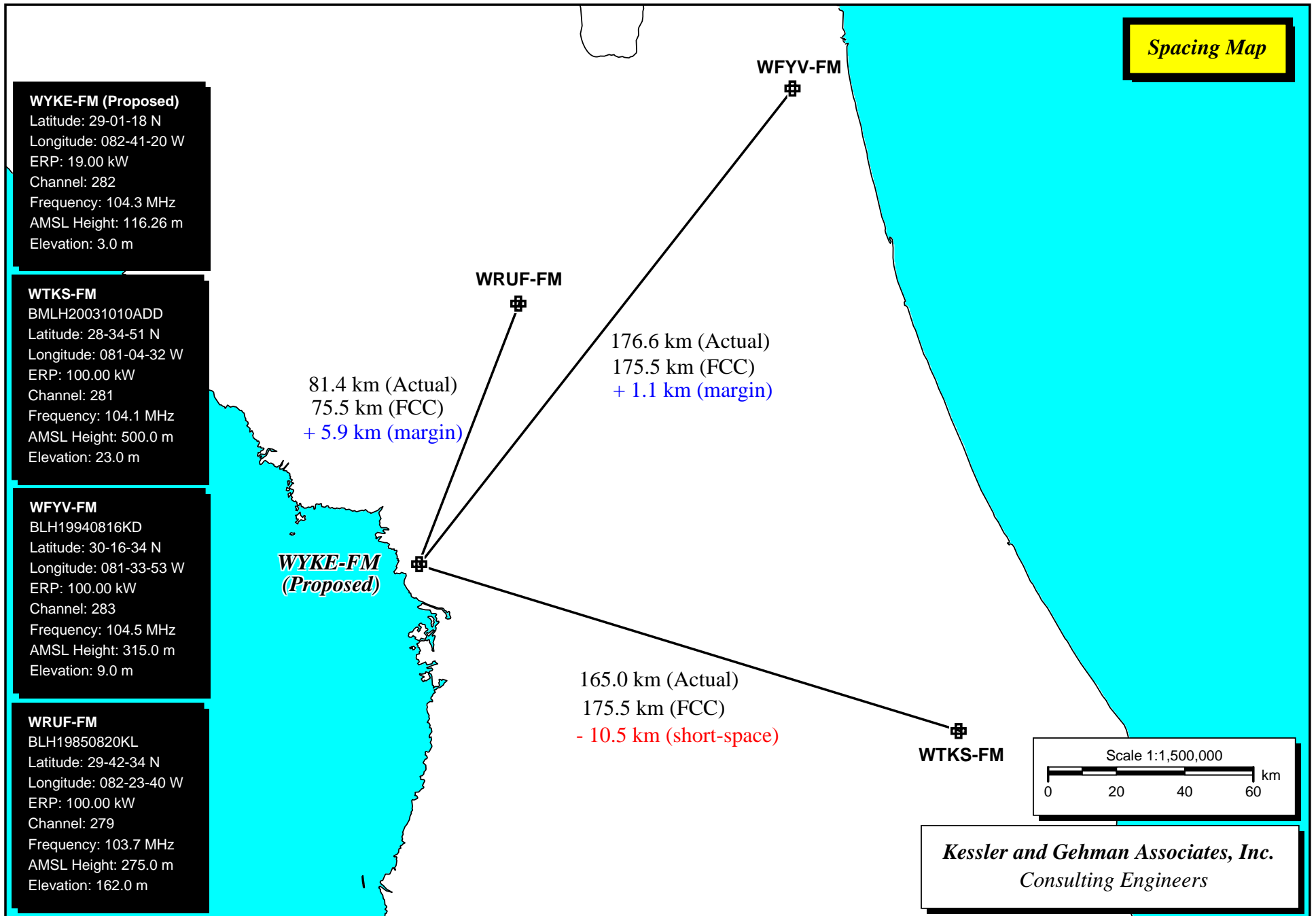
Kessler and Gehman Associates, Inc.
Telecommunications Consulting Engineers
Hypothetical Site Spacing Study (Fully Spaced)
WYKE-FM Channel 282 (104.3 MHz)

REFERENCE		DISPLAY DATES
29 04 51.0 N.	CLASS = C3	DATA 10-05-11
82 47 27.3 W.	Current Spacings to 3rd Adj.	SEARCH 10-05-11
----- Channel 282 - 104.3 MHz -----		

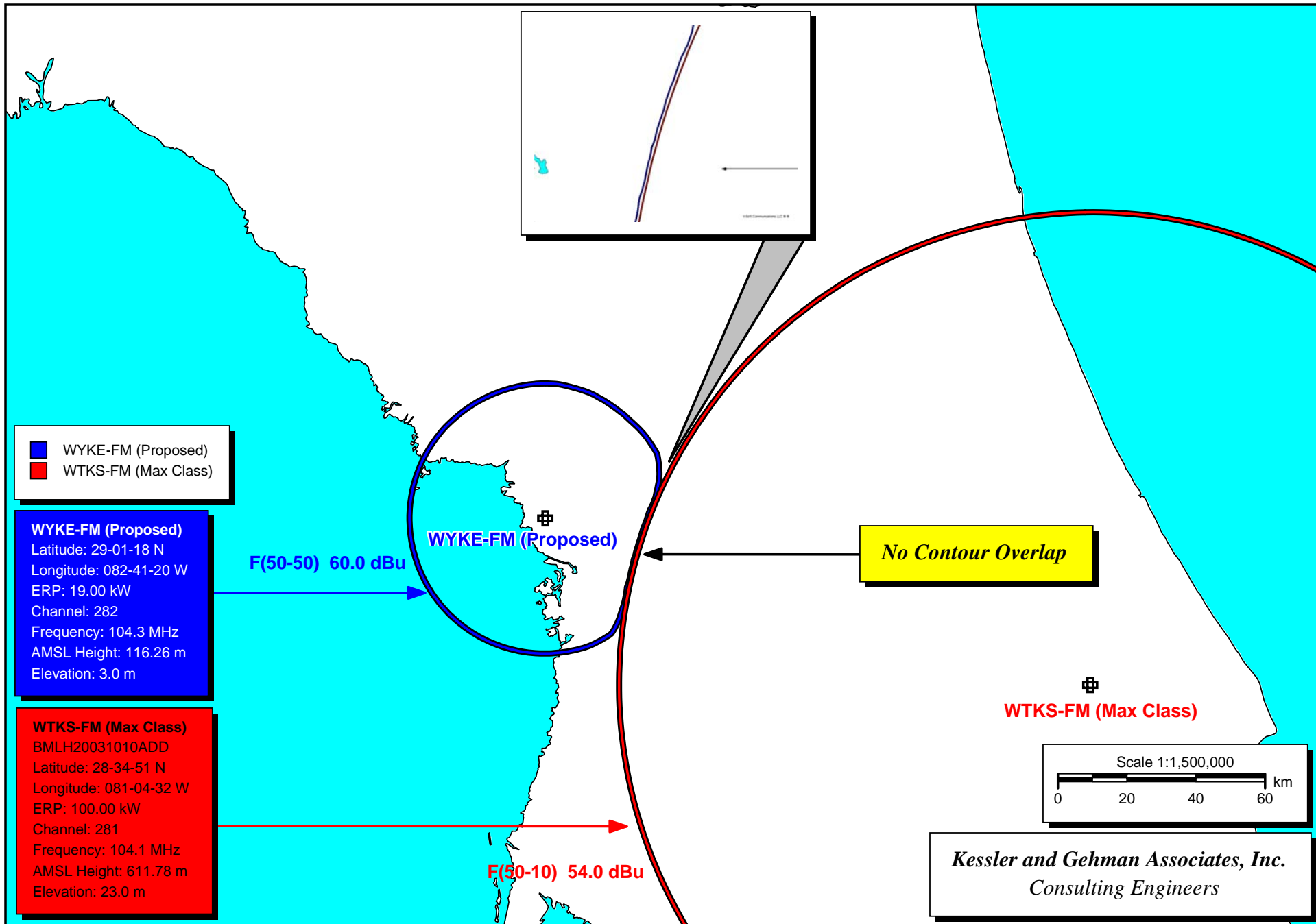
Call	Channel	Location	Azi	Dist	FCC	Margin
WYKE	RSV-A 282C3	Inglis	FL 90.0	0.0	152.5	-152.5
One Step Application						
WYKE	APP-N 282C3	Inglis	FL 123.5	11.9	152.5	-140.6
One Step Application						
ALLO	USE 282A	Inglis	FL 110.1	11.3	141.5	-130.2
WYKE	LIC 282A	Inglis	FL 123.5	11.9	141.5	-129.6
ALLO	USE 281C	Cocoa Beach	FL 108.0	176.4	175.5	0.9
Coordinates updated from LIC record BLH850508KC						
WTKS-FM	LIC 281C	Cocoa Beach	FL 108.0	176.4	175.5	0.9
ALLO	USE 283C	Atlantic Beach	FL 41.4	177.9	175.5	2.4
Coordinates updated from LIC record BLH880427KA						
WFYV-FM	LIC 283C	Atlantic Beach	FL 41.4	177.9	175.5	2.4
ALLO	USE 279C1	Gainesville	FL 28.7	79.6	75.5	4.1
Coordinates updated from LIC record BLH850820KL						
WRUF-FM	LIC 279C1	Gainesville	FL 28.7	79.6	75.5	4.1
WGLF	LIC 281C0	Tallahassee	FL 322.6	192.4	162.5	29.9
ALLO	USE 229C	Ocala	FL 74.8	67.4	30.5	36.9
Coordinates updated from LIC record BLH860512KC						
ALLO	USE 281C0	Tallahassee	FL 317.2	205.1	162.5	42.6
Coordinates updated from LIC record BLH800407AB						
ALLO	USE 285A	High Springs	FL 14.2	84.7	41.5	43.2
Coordinates updated from LIC record BLH850429LP						
WYGC	LIC 285A	High Springs	FL 14.3	84.7	41.5	43.2
WOGK	LIC 229C0	Ocala	FL 73.0	72.1	26.5	45.6
AL9905	USE 229C0	Ocala	FL 73.0	72.1	26.5	45.6
WKZM	CP -N 282C3	Sarasota	FL 171.3	202.4	152.5	49.9
One Step Application						
ALLO	USE 282C3	Sarasota	FL 172.2	205.2	152.5	52.7
One Step Application						
ALLO	USE 284C1	Tampa	FL 165.5	129.7	75.5	54.3
WRBQ-FM	LIC-N 284C1	Tampa	FL 163.3	133.0	75.5	57.5
WKZM	LIC 282A	Sarasota	FL 171.3	202.4	141.5	60.9

RSV-R = reserved and needs protection, RSV-A = allocation

WYKE-FM Existing Allotment Site, Proposed Allotment Site, Proposed WYKE-FM & WTKS-FM

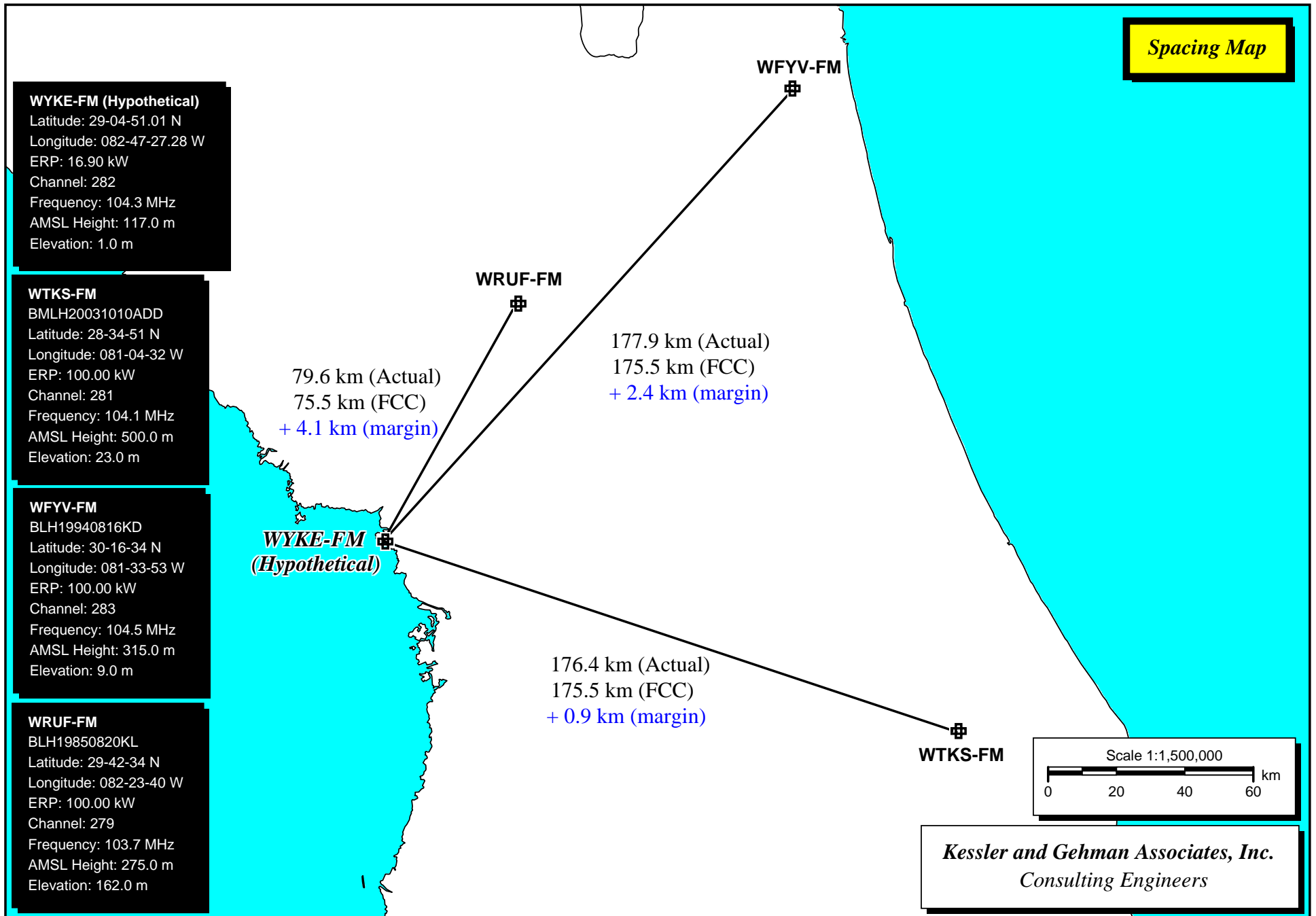


Spacing Study Map (Proposed Site)



73.215 Showing (WTKS-FM)

EXHIBIT 18



Spacing Study Map (Hypothetical Site)

Call Letters: WYKE-FM (Proposed)
 Latitude: 29-01-18 N
 Longitude: 082-41-20 W
 ERP: 19.00 kW
 Channel: 282
 Frequency: 104.3 MHz
 AMSL Height: 116.26 m
 Elevation: 3.0 m
 HAAT: 112.0 m
 Horiz. Antenna Pattern: Directional

Type of contour: FCC
 Location Variability: 50.0 %
 Time Variability: 50.0 %
 # of Radials Calculated: 360
 Field Strength: 60.00 dBuV/m

Primary Terrain: 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
0.0	39.0	114.2
1.0	39.0	114.2
2.0	39.0	114.2
3.0	39.0	114.2
4.0	39.0	114.2
5.0	39.0	114.1
6.0	39.0	113.9
7.0	38.9	113.5
8.0	38.9	113.1
9.0	38.9	112.9
10.0	38.8	112.4
11.0	38.8	112.2
12.0	38.7	111.8
13.0	38.7	111.6
14.0	38.7	111.5
15.0	38.6	111.1
16.0	38.6	111.0
17.0	38.6	110.9
18.0	38.5	110.6
19.0	38.5	110.5
20.0	38.5	110.2
21.0	38.4	110.0
22.0	38.4	109.6
23.0	38.3	108.9
24.0	38.2	108.3
25.0	38.2	108.1
26.0	38.1	107.8
27.0	38.1	107.5
28.0	38.0	107.0
29.0	38.0	106.7
30.0	37.9	106.3
31.0	37.9	106.1
32.0	37.8	105.8
33.0	37.8	105.5
34.0	37.7	105.2
35.0	37.7	105.0

36.0	37.7	105.0
37.0	37.7	104.9
38.0	37.6	104.5
39.0	37.6	104.0
40.0	37.5	103.8
41.0	37.5	103.6
42.0	37.5	103.7
43.0	37.5	103.7
44.0	37.5	103.8
45.0	37.5	103.8
46.0	37.5	103.9
47.0	37.5	103.9
48.0	37.5	104.0
49.0	37.5	103.9
50.0	37.5	103.9
51.0	37.5	103.8
52.0	37.5	103.7
53.0	37.5	103.5
54.0	37.4	103.3
55.0	37.4	103.2
56.0	37.4	103.1
57.0	37.4	103.1
58.0	37.4	103.0
59.0	37.4	103.0
60.0	37.4	102.9
61.0	37.2	102.9
62.0	36.9	102.9
63.0	36.7	102.9
64.0	36.5	103.0
65.0	36.3	103.1
66.0	36.0	103.2
67.0	35.8	103.3
68.0	35.6	103.3
69.0	35.3	103.3
70.0	35.1	103.4
71.0	34.8	103.5
72.0	34.5	103.7
73.0	34.2	103.8
74.0	33.8	104.0
75.0	33.5	104.3
76.0	33.3	104.9
77.0	33.0	105.4
78.0	32.7	106.2
79.0	32.5	107.2
80.0	32.1	107.6
81.0	31.9	107.8
82.0	31.5	107.7
83.0	31.2	107.3
84.0	30.8	106.8
85.0	30.5	106.3
86.0	30.2	105.7
87.0	30.0	105.3
88.0	29.8	105.1
89.0	29.6	104.8
90.0	29.4	104.7
91.0	29.3	104.6
92.0	29.1	104.5

93.0	29.0	104.2
94.0	28.8	103.9
95.0	28.6	103.7
96.0	28.5	103.4
97.0	28.4	103.3
98.0	28.3	103.0
99.0	28.3	103.0
100.0	28.2	103.0
101.0	28.2	103.2
102.0	28.1	103.2
103.0	28.1	103.2
104.0	28.0	103.3
105.0	28.0	103.4
106.0	28.0	103.5
107.0	28.0	103.4
108.0	28.0	103.2
109.0	28.0	103.3
110.0	28.0	103.8
111.0	28.1	104.5
112.0	28.2	105.2
113.0	28.2	105.6
114.0	28.2	106.0
115.0	28.3	106.7
116.0	28.4	107.3
117.0	28.6	108.0
118.0	28.7	108.5
119.0	28.8	108.8
120.0	28.9	109.0
121.0	29.1	109.2
122.0	29.3	109.3
123.0	29.5	109.5
124.0	29.7	109.9
125.0	29.9	110.4
126.0	30.1	110.7
127.0	30.3	111.0
128.0	30.6	111.3
129.0	30.7	111.5
130.0	30.9	111.6
131.0	31.3	111.7
132.0	31.7	111.7
133.0	32.1	111.8
134.0	32.5	111.8
135.0	32.8	111.9
136.0	33.2	112.0
137.0	33.6	112.0
138.0	33.9	112.1
139.0	34.3	112.3
140.0	34.6	112.4
141.0	35.0	112.6
142.0	35.5	112.8
143.0	35.9	113.2
144.0	36.3	113.3
145.0	36.7	113.5
146.0	37.1	113.7
147.0	37.4	113.7
148.0	37.8	114.1
149.0	38.2	114.1

150.0	38.5	114.0
151.0	38.6	114.3
152.0	38.6	114.4
153.0	38.7	114.3
154.0	38.7	114.3
155.0	38.8	114.3
156.0	38.8	114.2
157.0	38.9	114.3
158.0	38.9	114.3
159.0	39.0	114.4
160.0	39.1	114.3
161.0	39.1	114.5
162.0	39.1	114.5
163.0	39.1	114.6
164.0	39.1	114.6
165.0	39.1	114.6
166.0	39.1	114.6
167.0	39.1	114.6
168.0	39.1	114.6
169.0	39.1	114.6
170.0	39.1	114.7
171.0	39.1	114.6
172.0	39.1	114.7
173.0	39.1	114.7
174.0	39.1	114.7
175.0	39.1	114.7
176.0	39.1	114.8
177.0	39.1	114.9
178.0	39.1	114.8
179.0	39.1	114.9
180.0	39.1	114.9
181.0	39.1	114.9
182.0	39.1	115.0
183.0	39.2	115.0
184.0	39.1	115.0
185.0	39.1	115.0
186.0	39.2	115.1
187.0	39.2	115.1
188.0	39.2	115.1
189.0	39.2	115.1
190.0	39.2	115.2
191.0	39.2	115.2
192.0	39.2	115.2
193.0	39.2	115.2
194.0	39.2	115.2
195.0	39.2	115.3
196.0	39.2	115.3
197.0	39.2	115.3
198.0	39.2	115.3
199.0	39.2	115.3
200.0	39.2	115.3
201.0	39.2	115.4
202.0	39.2	115.4
203.0	39.2	115.4
204.0	39.2	115.4
205.0	39.2	115.4
206.0	39.2	115.4

207.0	39.2	115.5
208.0	39.2	115.5
209.0	39.2	115.5
210.0	39.2	115.5
211.0	39.2	115.5
212.0	39.2	115.6
213.0	39.2	115.6
214.0	39.2	115.6
215.0	39.2	115.6
216.0	39.2	115.5
217.0	39.2	115.6
218.0	39.2	115.6
219.0	39.2	115.6
220.0	39.2	115.6
221.0	39.2	115.7
222.0	39.2	115.6
223.0	39.2	115.7
224.0	39.2	115.8
225.0	39.2	115.8
226.0	39.2	115.8
227.0	39.2	115.8
228.0	39.2	115.7
229.0	39.2	115.8
230.0	39.2	115.7
231.0	39.2	115.8
232.0	39.3	115.8
233.0	39.3	115.8
234.0	39.3	115.9
235.0	39.3	115.9
236.0	39.3	115.9
237.0	39.3	115.9
238.0	39.3	115.9
239.0	39.3	115.9
240.0	39.3	115.9
241.0	39.3	115.9
242.0	39.3	115.9
243.0	39.3	115.9
244.0	39.3	115.8
245.0	39.3	115.8
246.0	39.3	115.8
247.0	39.3	115.8
248.0	39.3	115.8
249.0	39.3	115.9
250.0	39.3	115.9
251.0	39.3	115.9
252.0	39.3	115.9
253.0	39.3	115.9
254.0	39.3	115.9
255.0	39.3	115.9
256.0	39.3	115.9
257.0	39.3	115.9
258.0	39.3	115.9
259.0	39.3	115.9
260.0	39.3	115.9
261.0	39.3	115.9
262.0	39.3	115.9
263.0	39.3	115.9

264.0	39.3	116.0
265.0	39.3	115.9
266.0	39.3	115.9
267.0	39.3	116.0
268.0	39.3	116.0
269.0	39.3	116.0
270.0	39.3	116.0
271.0	39.3	116.0
272.0	39.3	116.0
273.0	39.3	116.0
274.0	39.3	116.0
275.0	39.3	116.1
276.0	39.3	116.0
277.0	39.3	116.0
278.0	39.3	116.0
279.0	39.3	116.0
280.0	39.3	116.0
281.0	39.3	116.0
282.0	39.3	116.0
283.0	39.3	115.9
284.0	39.3	115.9
285.0	39.3	115.9
286.0	39.3	115.9
287.0	39.3	115.9
288.0	39.3	115.9
289.0	39.3	115.9
290.0	39.3	115.8
291.0	39.2	115.8
292.0	39.2	115.8
293.0	39.2	115.7
294.0	39.2	115.7
295.0	39.2	115.8
296.0	39.2	115.7
297.0	39.2	115.7
298.0	39.2	115.5
299.0	39.2	115.5
300.0	39.2	115.5
301.0	39.2	115.4
302.0	39.2	115.4
303.0	39.2	115.3
304.0	39.2	115.2
305.0	39.2	115.2
306.0	39.2	115.2
307.0	39.2	115.1
308.0	39.2	115.1
309.0	39.2	115.1
310.0	39.2	115.1
311.0	39.2	115.1
312.0	39.2	115.0
313.0	39.1	114.9
314.0	39.1	114.8
315.0	39.1	114.7
316.0	39.1	114.5
317.0	39.1	114.4
318.0	39.1	114.3
319.0	39.0	114.2
320.0	39.0	114.1

321.0	39.0	114.2
322.0	39.0	114.2
323.0	39.0	114.2
324.0	39.0	114.1
325.0	39.0	114.0
326.0	39.0	114.0
327.0	39.0	113.9
328.0	39.0	114.0
329.0	39.0	114.1
330.0	39.0	113.9
331.0	39.0	113.9
332.0	39.0	113.9
333.0	39.0	113.8
334.0	39.0	113.8
335.0	39.0	113.8
336.0	39.0	113.9
337.0	39.0	113.8
338.0	39.0	113.8
339.0	39.0	113.8
340.0	39.0	113.8
341.0	39.0	113.8
342.0	39.0	113.9
343.0	39.0	113.8
344.0	39.0	113.9
345.0	39.0	113.9
346.0	39.0	113.9
347.0	39.0	113.9
348.0	39.0	113.9
349.0	39.0	114.0
350.0	39.0	114.0
351.0	39.0	114.0
352.0	39.0	114.1
353.0	39.0	114.0
354.0	39.0	114.0
355.0	39.0	114.1
356.0	39.0	114.2
357.0	39.0	114.2
358.0	39.0	114.2
359.0	39.0	114.2

Call Letters: WYKE-FM (Proposed)

Latitude: 29-01-18 N

Longitude: 082-41-20 W

ERP: 19.00 kW

Channel: 282

Frequency: 104.3 MHz

AMSL Height: 116.26 m

Elevation: 3.0 m

HAAT: 112.0 m

Horiz. Antenna Pattern: Directional

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 10.0 %

of Radials Calculated: 360

Field Strength: 54.00 dBuV/m

Primary Terrain: 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
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0.0	59.3	114.2
1.0	59.3	114.2
2.0	59.3	114.2
3.0	59.3	114.2
4.0	59.3	114.2
5.0	59.3	114.1
6.0	59.3	113.9
7.0	59.2	113.5
8.0	59.1	113.1
9.0	59.1	112.9
10.0	59.0	112.4
11.0	59.0	112.2
12.0	58.9	111.8
13.0	58.9	111.6
14.0	58.9	111.5
15.0	58.8	111.1
16.0	58.8	111.0
17.0	58.8	110.9
18.0	58.7	110.6
19.0	58.7	110.5
20.0	58.7	110.2
21.0	58.6	110.0
22.0	58.6	109.6
23.0	58.4	108.9
24.0	58.3	108.3
25.0	58.3	108.1
26.0	58.3	107.8
27.0	58.2	107.5
28.0	58.1	107.0
29.0	58.1	106.7
30.0	58.0	106.3
31.0	58.0	106.1
32.0	57.9	105.8
33.0	57.9	105.5
34.0	57.8	105.2
35.0	57.8	105.0

36.0	57.8	105.0
37.0	57.8	104.9
38.0	57.7	104.5
39.0	57.6	104.0
40.0	57.6	103.8
41.0	57.5	103.6
42.0	57.5	103.7
43.0	57.5	103.7
44.0	57.6	103.8
45.0	57.6	103.8
46.0	57.6	103.9
47.0	57.6	103.9
48.0	57.6	104.0
49.0	57.6	103.9
50.0	57.6	103.9
51.0	57.6	103.8
52.0	57.5	103.7
53.0	57.5	103.5
54.0	57.5	103.3
55.0	57.5	103.2
56.0	57.4	103.1
57.0	57.4	103.1
58.0	57.4	103.0
59.0	57.4	103.0
60.0	57.4	102.9
61.0	57.1	102.9
62.0	56.7	102.9
63.0	56.4	102.9
64.0	56.1	103.0
65.0	55.8	103.1
66.0	55.4	103.2
67.0	55.1	103.3
68.0	54.8	103.3
69.0	54.4	103.3
70.0	54.1	103.4
71.0	53.6	103.5
72.0	53.2	103.7
73.0	52.7	103.8
74.0	52.2	104.0
75.0	51.8	104.3
76.0	51.4	104.9
77.0	50.9	105.4
78.0	50.5	106.2
79.0	50.1	107.2
80.0	49.6	107.6
81.0	49.2	107.8
82.0	48.8	107.7
83.0	48.2	107.3
84.0	47.7	106.8
85.0	47.1	106.3
86.0	46.8	105.7
87.0	46.4	105.3
88.0	46.1	105.1
89.0	45.8	104.8
90.0	45.5	104.7
91.0	45.3	104.6
92.0	45.0	104.5

93.0	44.8	104.2
94.0	44.5	103.9
95.0	44.2	103.7
96.0	44.0	103.4
97.0	43.9	103.3
98.0	43.7	103.0
99.0	43.6	103.0
100.0	43.5	103.0
101.0	43.4	103.2
102.0	43.4	103.2
103.0	43.3	103.2
104.0	43.2	103.3
105.0	43.1	103.4
106.0	43.2	103.5
107.0	43.1	103.4
108.0	43.1	103.2
109.0	43.1	103.3
110.0	43.2	103.8
111.0	43.3	104.5
112.0	43.4	105.2
113.0	43.4	105.6
114.0	43.5	106.0
115.0	43.6	106.7
116.0	43.8	107.3
117.0	44.0	108.0
118.0	44.2	108.5
119.0	44.4	108.8
120.0	44.6	109.0
121.0	44.9	109.2
122.0	45.2	109.3
123.0	45.5	109.5
124.0	45.8	109.9
125.0	46.2	110.4
126.0	46.5	110.7
127.0	46.8	111.0
128.0	47.1	111.3
129.0	47.4	111.5
130.0	47.7	111.6
131.0	48.3	111.7
132.0	48.9	111.7
133.0	49.4	111.8
134.0	50.0	111.8
135.0	50.5	111.9
136.0	51.0	112.0
137.0	51.5	112.0
138.0	52.0	112.1
139.0	52.5	112.3
140.0	53.0	112.4
141.0	53.6	112.6
142.0	54.2	112.8
143.0	54.8	113.2
144.0	55.4	113.3
145.0	55.9	113.5
146.0	56.5	113.7
147.0	57.0	113.7
148.0	57.5	114.1
149.0	58.0	114.1

150.0	58.5	114.0
151.0	58.6	114.3
152.0	58.7	114.4
153.0	58.8	114.3
154.0	58.9	114.3
155.0	58.9	114.3
156.0	59.0	114.2
157.0	59.1	114.3
158.0	59.2	114.3
159.0	59.3	114.4
160.0	59.3	114.3
161.0	59.4	114.5
162.0	59.4	114.5
163.0	59.4	114.6
164.0	59.4	114.6
165.0	59.4	114.6
166.0	59.4	114.6
167.0	59.4	114.6
168.0	59.4	114.6
169.0	59.4	114.6
170.0	59.4	114.7
171.0	59.4	114.6
172.0	59.4	114.7
173.0	59.4	114.7
174.0	59.4	114.7
175.0	59.4	114.7
176.0	59.4	114.8
177.0	59.4	114.9
178.0	59.4	114.8
179.0	59.4	114.9
180.0	59.4	114.9
181.0	59.4	114.9
182.0	59.4	115.0
183.0	59.4	115.0
184.0	59.4	115.0
185.0	59.4	115.0
186.0	59.5	115.1
187.0	59.5	115.1
188.0	59.5	115.1
189.0	59.5	115.1
190.0	59.5	115.2
191.0	59.5	115.2
192.0	59.5	115.2
193.0	59.5	115.2
194.0	59.5	115.2
195.0	59.5	115.3
196.0	59.5	115.3
197.0	59.5	115.3
198.0	59.5	115.3
199.0	59.5	115.3
200.0	59.5	115.3
201.0	59.5	115.4
202.0	59.5	115.4
203.0	59.5	115.4
204.0	59.5	115.4
205.0	59.5	115.4
206.0	59.5	115.4

207.0	59.5	115.5
208.0	59.5	115.5
209.0	59.5	115.5
210.0	59.5	115.5
211.0	59.5	115.5
212.0	59.5	115.6
213.0	59.5	115.6
214.0	59.5	115.6
215.0	59.5	115.6
216.0	59.5	115.5
217.0	59.5	115.6
218.0	59.5	115.6
219.0	59.5	115.6
220.0	59.5	115.6
221.0	59.5	115.7
222.0	59.5	115.6
223.0	59.6	115.7
224.0	59.6	115.8
225.0	59.6	115.8
226.0	59.6	115.8
227.0	59.6	115.8
228.0	59.6	115.7
229.0	59.6	115.8
230.0	59.6	115.7
231.0	59.6	115.8
232.0	59.6	115.8
233.0	59.6	115.8
234.0	59.6	115.9
235.0	59.6	115.9
236.0	59.6	115.9
237.0	59.6	115.9
238.0	59.6	115.9
239.0	59.6	115.9
240.0	59.6	115.9
241.0	59.6	115.9
242.0	59.6	115.9
243.0	59.6	115.9
244.0	59.6	115.8
245.0	59.6	115.8
246.0	59.6	115.8
247.0	59.6	115.8
248.0	59.6	115.8
249.0	59.6	115.9
250.0	59.6	115.9
251.0	59.6	115.9
252.0	59.6	115.9
253.0	59.6	115.9
254.0	59.6	115.9
255.0	59.6	115.9
256.0	59.6	115.9
257.0	59.6	115.9
258.0	59.6	115.9
259.0	59.6	115.9
260.0	59.6	115.9
261.0	59.6	115.9
262.0	59.6	115.9
263.0	59.6	115.9

264.0	59.6	116.0
265.0	59.6	115.9
266.0	59.6	115.9
267.0	59.6	116.0
268.0	59.6	116.0
269.0	59.6	116.0
270.0	59.6	116.0
271.0	59.6	116.0
272.0	59.6	116.0
273.0	59.6	116.0
274.0	59.6	116.0
275.0	59.6	116.1
276.0	59.6	116.0
277.0	59.6	116.0
278.0	59.6	116.0
279.0	59.6	116.0
280.0	59.6	116.0
281.0	59.6	116.0
282.0	59.6	116.0
283.0	59.6	115.9
284.0	59.6	115.9
285.0	59.6	115.9
286.0	59.6	115.9
287.0	59.6	115.9
288.0	59.6	115.9
289.0	59.6	115.9
290.0	59.6	115.8
291.0	59.6	115.8
292.0	59.6	115.8
293.0	59.6	115.7
294.0	59.6	115.7
295.0	59.6	115.8
296.0	59.6	115.7
297.0	59.5	115.7
298.0	59.5	115.5
299.0	59.5	115.5
300.0	59.5	115.5
301.0	59.5	115.4
302.0	59.5	115.4
303.0	59.5	115.3
304.0	59.5	115.2
305.0	59.5	115.2
306.0	59.5	115.2
307.0	59.5	115.1
308.0	59.5	115.1
309.0	59.5	115.1
310.0	59.5	115.1
311.0	59.5	115.1
312.0	59.4	115.0
313.0	59.4	114.9
314.0	59.4	114.8
315.0	59.4	114.7
316.0	59.4	114.5
317.0	59.3	114.4
318.0	59.3	114.3
319.0	59.3	114.2
320.0	59.3	114.1

321.0	59.3	114.2
322.0	59.3	114.2
323.0	59.3	114.2
324.0	59.3	114.1
325.0	59.3	114.0
326.0	59.3	114.0
327.0	59.3	113.9
328.0	59.3	114.0
329.0	59.3	114.1
330.0	59.3	113.9
331.0	59.3	113.9
332.0	59.3	113.9
333.0	59.2	113.8
334.0	59.2	113.8
335.0	59.3	113.8
336.0	59.3	113.9
337.0	59.2	113.8
338.0	59.2	113.8
339.0	59.2	113.8
340.0	59.3	113.8
341.0	59.3	113.8
342.0	59.3	113.9
343.0	59.3	113.8
344.0	59.3	113.9
345.0	59.3	113.9
346.0	59.3	113.9
347.0	59.3	113.9
348.0	59.3	113.9
349.0	59.3	114.0
350.0	59.3	114.0
351.0	59.3	114.0
352.0	59.3	114.1
353.0	59.3	114.0
354.0	59.3	114.0
355.0	59.3	114.1
356.0	59.3	114.2
357.0	59.3	114.2
358.0	59.3	114.2
359.0	59.3	114.2

Call Letters: WTKS-FM (Max Class)

File Number: BMLH20031010ADD

Latitude: 28-34-51 N

Longitude: 081-04-32 W

ERP: 100.00 kW

Channel: 281

Frequency: 104.1 MHz

AMSL Height: 611.78 m

Elevation: 23.0 m

HAAT: 600.0 m

Horiz. Antenna Pattern: Omni

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 50.0 %

of Radials Calculated: 360

Field Strength: 60.00 dBuV/m

Primary Terrain: 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
-----	-----	-----
0.0	92.0	605.6
1.0	92.0	605.9
2.0	92.1	606.1
3.0	92.1	606.3
4.0	92.1	606.5
5.0	92.1	606.6
6.0	92.1	606.7
7.0	92.1	606.9
8.0	92.1	607.0
9.0	92.1	607.1
10.0	92.1	607.2
11.0	92.1	607.2
12.0	92.1	607.2
13.0	92.1	607.2
14.0	92.1	607.2
15.0	92.1	607.4
16.0	92.1	607.5
17.0	92.1	607.5
18.0	92.1	607.6
19.0	92.1	607.6
20.0	92.1	607.7
21.0	92.1	607.7
22.0	92.1	607.7
23.0	92.1	607.7
24.0	92.1	607.8
25.0	92.1	607.8
26.0	92.1	607.7
27.0	92.1	607.8
28.0	92.1	607.8
29.0	92.1	607.8
30.0	92.1	607.9
31.0	92.1	607.8
32.0	92.1	607.7
33.0	92.1	607.4
34.0	92.1	607.1

35.0	92.1	607.0
36.0	92.1	607.0
37.0	92.1	607.1
38.0	92.1	607.2
39.0	92.1	607.3
40.0	92.1	607.4
41.0	92.1	607.4
42.0	92.1	607.5
43.0	92.1	607.6
44.0	92.1	607.8
45.0	92.1	607.9
46.0	92.1	608.0
47.0	92.1	608.2
48.0	92.1	608.4
49.0	92.1	608.5
50.0	92.1	608.7
51.0	92.1	608.8
52.0	92.2	608.8
53.0	92.2	608.9
54.0	92.2	609.0
55.0	92.2	609.1
56.0	92.2	609.1
57.0	92.2	609.2
58.0	92.2	609.2
59.0	92.2	609.2
60.0	92.2	609.2
61.0	92.2	609.2
62.0	92.2	609.2
63.0	92.2	609.3
64.0	92.2	609.4
65.0	92.2	609.4
66.0	92.2	609.4
67.0	92.2	609.4
68.0	92.2	609.4
69.0	92.2	609.4
70.0	92.2	609.4
71.0	92.2	609.4
72.0	92.2	609.4
73.0	92.2	609.4
74.0	92.2	609.3
75.0	92.2	609.3
76.0	92.2	609.3
77.0	92.2	609.2
78.0	92.2	609.2
79.0	92.2	609.2
80.0	92.2	609.2
81.0	92.2	609.1
82.0	92.2	609.1
83.0	92.2	608.9
84.0	92.2	608.9
85.0	92.2	608.8
86.0	92.1	608.8
87.0	92.1	608.6
88.0	92.1	608.5
89.0	92.1	608.4
90.0	92.1	608.3
91.0	92.1	608.2

92.0	92.1	608.1
93.0	92.1	608.0
94.0	92.1	607.9
95.0	92.1	607.8
96.0	92.1	607.7
97.0	92.1	607.5
98.0	92.1	607.4
99.0	92.1	607.1
100.0	92.1	607.0
101.0	92.1	606.7
102.0	92.1	606.5
103.0	92.1	606.4
104.0	92.1	606.2
105.0	92.0	606.0
106.0	92.0	605.8
107.0	92.0	605.7
108.0	92.0	605.5
109.0	92.0	605.4
110.0	92.0	605.2
111.0	92.0	605.1
112.0	92.0	605.0
113.0	92.0	604.8
114.0	92.0	604.5
115.0	92.0	604.3
116.0	92.0	604.0
117.0	92.0	603.7
118.0	92.0	603.6
119.0	91.9	603.4
120.0	91.9	603.2
121.0	91.9	603.0
122.0	91.9	602.9
123.0	91.9	602.7
124.0	91.9	602.6
125.0	91.9	602.4
126.0	91.9	602.2
127.0	91.9	601.9
128.0	91.9	601.6
129.0	91.9	601.3
130.0	91.9	601.1
131.0	91.8	600.7
132.0	91.8	600.4
133.0	91.8	600.2
134.0	91.8	600.0
135.0	91.8	599.7
136.0	91.8	599.5
137.0	91.8	599.2
138.0	91.8	599.0
139.0	91.8	598.6
140.0	91.8	598.2
141.0	91.7	597.9
142.0	91.7	597.6
143.0	91.7	597.2
144.0	91.7	597.0
145.0	91.7	596.8
146.0	91.7	596.6
147.0	91.7	596.4
148.0	91.7	596.2

149.0	91.7	596.0
150.0	91.7	595.7
151.0	91.6	595.4
152.0	91.6	595.1
153.0	91.6	594.8
154.0	91.6	594.5
155.0	91.6	594.3
156.0	91.6	594.1
157.0	91.6	593.9
158.0	91.6	593.8
159.0	91.6	593.5
160.0	91.6	593.3
161.0	91.6	593.0
162.0	91.5	592.6
163.0	91.5	592.2
164.0	91.5	591.9
165.0	91.5	591.7
166.0	91.5	591.5
167.0	91.5	591.3
168.0	91.5	591.1
169.0	91.5	590.8
170.0	91.5	590.6
171.0	91.5	590.5
172.0	91.5	590.6
173.0	91.5	590.7
174.0	91.5	590.8
175.0	91.5	591.0
176.0	91.5	591.2
177.0	91.5	591.5
178.0	91.5	591.6
179.0	91.5	591.7
180.0	91.5	591.8
181.0	91.5	591.9
182.0	91.5	592.0
183.0	91.5	592.3
184.0	91.5	592.6
185.0	91.6	593.0
186.0	91.6	593.8
187.0	91.6	594.0
188.0	91.6	594.2
189.0	91.6	594.4
190.0	91.6	594.5
191.0	91.6	594.5
192.0	91.6	594.7
193.0	91.6	594.8
194.0	91.6	594.9
195.0	91.6	595.0
196.0	91.6	595.2
197.0	91.6	595.1
198.0	91.6	594.5
199.0	91.6	593.5
200.0	91.6	593.4
201.0	91.6	593.4
202.0	91.6	593.4
203.0	91.6	593.5
204.0	91.6	593.5
205.0	91.6	593.5

206.0	91.6	593.5
207.0	91.6	593.6
208.0	91.6	593.7
209.0	91.6	593.8
210.0	91.6	594.2
211.0	91.6	594.5
212.0	91.6	594.4
213.0	91.6	594.3
214.0	91.6	594.2
215.0	91.6	594.3
216.0	91.6	594.4
217.0	91.6	594.3
218.0	91.6	594.2
219.0	91.6	594.3
220.0	91.6	594.3
221.0	91.6	594.3
222.0	91.6	594.4
223.0	91.6	594.4
224.0	91.6	594.4
225.0	91.6	594.4
226.0	91.6	594.3
227.0	91.6	594.3
228.0	91.6	594.3
229.0	91.6	594.4
230.0	91.6	594.2
231.0	91.6	594.1
232.0	91.6	594.1
233.0	91.6	593.9
234.0	91.6	593.9
235.0	91.6	593.8
236.0	91.6	593.8
237.0	91.6	593.8
238.0	91.6	593.8
239.0	91.6	593.8
240.0	91.6	593.8
241.0	91.6	593.6
242.0	91.6	593.5
243.0	91.6	593.5
244.0	91.6	593.4
245.0	91.6	593.5
246.0	91.6	593.5
247.0	91.6	593.5
248.0	91.6	593.6
249.0	91.6	593.6
250.0	91.6	593.6
251.0	91.6	593.6
252.0	91.6	593.6
253.0	91.6	593.7
254.0	91.6	593.8
255.0	91.6	593.8
256.0	91.6	593.9
257.0	91.6	593.9
258.0	91.6	593.9
259.0	91.6	593.9
260.0	91.6	593.9
261.0	91.6	593.8
262.0	91.6	594.0

263.0	91.6	594.0
264.0	91.6	594.2
265.0	91.6	594.5
266.0	91.6	594.7
267.0	91.6	594.9
268.0	91.6	595.1
269.0	91.6	595.2
270.0	91.6	595.2
271.0	91.6	595.1
272.0	91.6	595.0
273.0	91.6	595.1
274.0	91.6	595.3
275.0	91.6	595.3
276.0	91.6	595.3
277.0	91.6	595.1
278.0	91.6	595.0
279.0	91.6	594.8
280.0	91.6	594.9
281.0	91.6	595.0
282.0	91.6	595.2
283.0	91.6	595.4
284.0	91.7	595.6
285.0	91.7	595.9
286.0	91.7	596.3
287.0	91.7	596.5
288.0	91.7	596.7
289.0	91.7	596.7
290.0	91.7	596.7
291.0	91.7	596.9
292.0	91.7	597.0
293.0	91.7	597.3
294.0	91.7	597.4
295.0	91.7	597.4
296.0	91.7	597.2
297.0	91.7	597.1
298.0	91.7	596.9
299.0	91.7	596.8
300.0	91.7	596.8
301.0	91.7	596.5
302.0	91.7	596.1
303.0	91.6	595.5
304.0	91.6	595.3
305.0	91.6	595.3
306.0	91.6	595.4
307.0	91.7	595.7
308.0	91.7	596.2
309.0	91.7	596.7
310.0	91.7	596.8
311.0	91.7	596.9
312.0	91.7	596.8
313.0	91.7	596.7
314.0	91.7	597.0
315.0	91.7	597.2
316.0	91.7	597.5
317.0	91.7	597.7
318.0	91.7	597.9
319.0	91.7	598.2

320.0	91.7	598.2
321.0	91.7	598.0
322.0	91.7	598.0
323.0	91.7	598.1
324.0	91.8	598.5
325.0	91.8	598.7
326.0	91.8	598.7
327.0	91.8	598.8
328.0	91.8	599.1
329.0	91.8	599.6
330.0	91.8	600.2
331.0	91.8	600.5
332.0	91.8	600.6
333.0	91.8	600.4
334.0	91.8	600.0
335.0	91.8	599.6
336.0	91.8	599.4
337.0	91.8	599.1
338.0	91.8	599.0
339.0	91.8	599.0
340.0	91.8	599.3
341.0	91.8	599.3
342.0	91.8	599.3
343.0	91.8	599.3
344.0	91.8	599.2
345.0	91.8	599.2
346.0	91.8	599.4
347.0	91.8	599.9
348.0	91.8	600.2
349.0	91.8	600.7
350.0	91.9	601.3
351.0	91.9	601.6
352.0	91.9	601.9
353.0	91.9	602.1
354.0	91.9	602.4
355.0	91.9	602.7
356.0	91.9	603.1
357.0	92.0	603.7
358.0	92.0	604.5
359.0	92.0	605.1

Call Letters: WTKS-FM (Max Class)

File Number: BMLH20031010ADD

Latitude: 28-34-51 N

Longitude: 081-04-32 W

ERP: 100.00 kW

Channel: 281

Frequency: 104.1 MHz

AMSL Height: 611.78 m

Elevation: 23.0 m

HAAT: 600.0 m

Horiz. Antenna Pattern: Omni

Type of contour: FCC

Location Variability: 50.0 %

Time Variability: 10.0 %

of Radials Calculated: 360

Field Strength: 54.00 dBuV/m

Primary Terrain: 3 Second US Terrain

Bearing (deg)	Distance (km)	HAAT (m)
-----	-----	-----
0.0	136.8	605.6
1.0	136.9	605.9
2.0	136.9	606.1
3.0	136.9	606.3
4.0	136.9	606.5
5.0	136.9	606.6
6.0	136.9	606.7
7.0	136.9	606.9
8.0	136.9	607.0
9.0	136.9	607.1
10.0	136.9	607.2
11.0	136.9	607.2
12.0	136.9	607.2
13.0	136.9	607.2
14.0	136.9	607.2
15.0	136.9	607.4
16.0	136.9	607.5
17.0	136.9	607.5
18.0	136.9	607.6
19.0	136.9	607.6
20.0	136.9	607.7
21.0	136.9	607.7
22.0	136.9	607.7
23.0	136.9	607.7
24.0	136.9	607.8
25.0	136.9	607.8
26.0	136.9	607.7
27.0	136.9	607.8
28.0	136.9	607.8
29.0	136.9	607.8
30.0	136.9	607.9
31.0	136.9	607.8
32.0	136.9	607.7
33.0	136.9	607.4
34.0	136.9	607.1

35.0	136.9	607.0
36.0	136.9	607.0
37.0	136.9	607.1
38.0	136.9	607.2
39.0	136.9	607.3
40.0	136.9	607.4
41.0	136.9	607.4
42.0	136.9	607.5
43.0	136.9	607.6
44.0	136.9	607.8
45.0	137.0	607.9
46.0	137.0	608.0
47.0	137.0	608.2
48.0	137.0	608.4
49.0	137.0	608.5
50.0	137.0	608.7
51.0	137.0	608.8
52.0	137.0	608.8
53.0	137.0	608.9
54.0	137.0	609.0
55.0	137.0	609.1
56.0	137.0	609.1
57.0	137.0	609.2
58.0	137.0	609.2
59.0	137.0	609.2
60.0	137.0	609.2
61.0	137.0	609.2
62.0	137.0	609.2
63.0	137.0	609.3
64.0	137.0	609.4
65.0	137.0	609.4
66.0	137.0	609.4
67.0	137.0	609.4
68.0	137.0	609.4
69.0	137.0	609.4
70.0	137.0	609.4
71.0	137.0	609.4
72.0	137.0	609.4
73.0	137.0	609.4
74.0	137.0	609.3
75.0	137.0	609.3
76.0	137.0	609.3
77.0	137.0	609.2
78.0	137.0	609.2
79.0	137.0	609.2
80.0	137.0	609.2
81.0	137.0	609.1
82.0	137.0	609.1
83.0	137.0	608.9
84.0	137.0	608.9
85.0	137.0	608.8
86.0	137.0	608.8
87.0	137.0	608.6
88.0	137.0	608.5
89.0	137.0	608.4
90.0	137.0	608.3
91.0	137.0	608.2

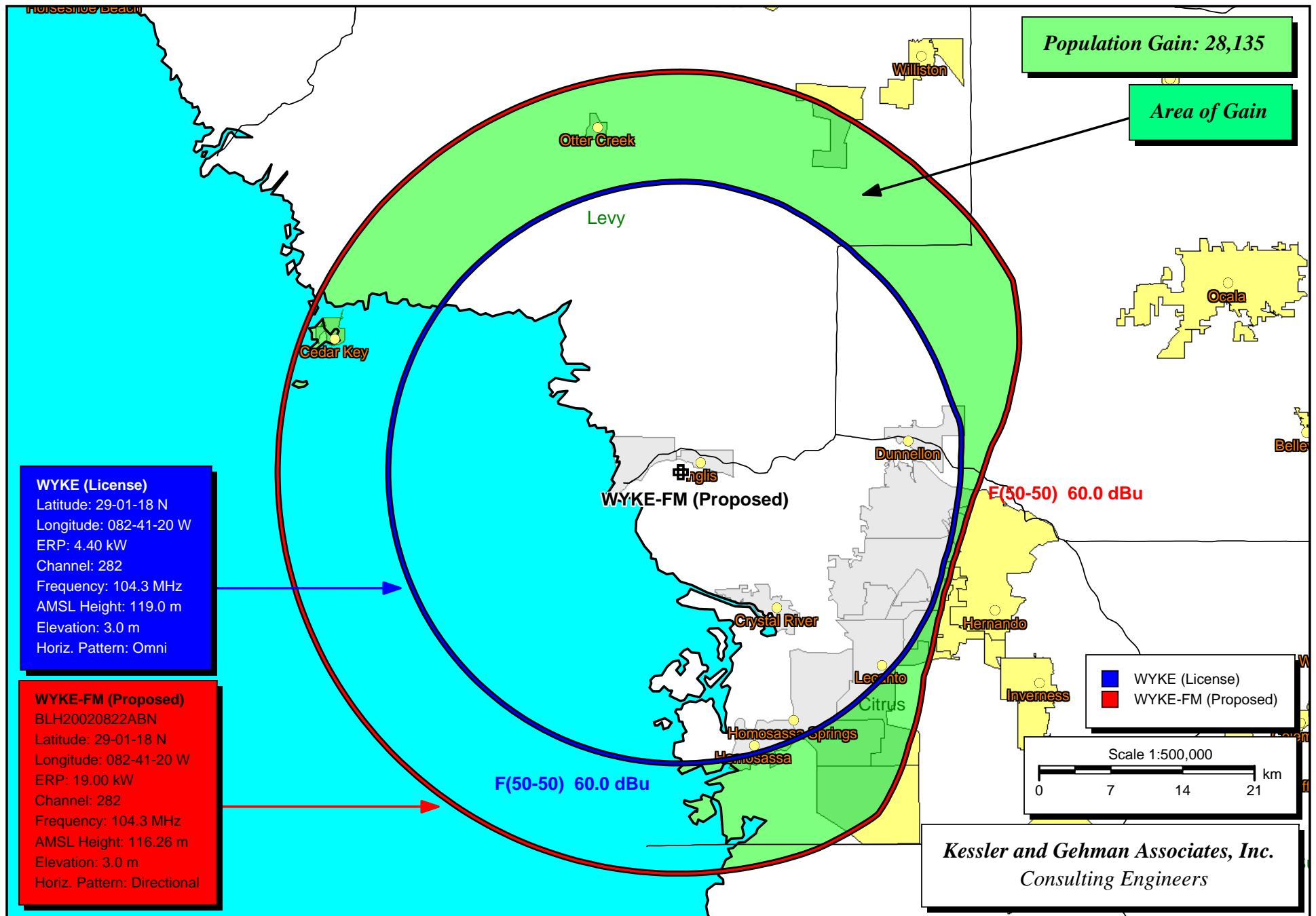
92.0	137.0	608.1
93.0	137.0	608.0
94.0	136.9	607.9
95.0	136.9	607.8
96.0	136.9	607.7
97.0	136.9	607.5
98.0	136.9	607.4
99.0	136.9	607.1
100.0	136.9	607.0
101.0	136.9	606.7
102.0	136.9	606.5
103.0	136.9	606.4
104.0	136.9	606.2
105.0	136.9	606.0
106.0	136.8	605.8
107.0	136.8	605.7
108.0	136.8	605.5
109.0	136.8	605.4
110.0	136.8	605.2
111.0	136.8	605.1
112.0	136.8	605.0
113.0	136.8	604.8
114.0	136.8	604.5
115.0	136.8	604.3
116.0	136.8	604.0
117.0	136.7	603.7
118.0	136.7	603.6
119.0	136.7	603.4
120.0	136.7	603.2
121.0	136.7	603.0
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131.0	136.6	600.7
132.0	136.6	600.4
133.0	136.6	600.2
134.0	136.6	600.0
135.0	136.6	599.7
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137.0	136.5	599.2
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141.0	136.5	597.9
142.0	136.5	597.6
143.0	136.4	597.2
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146.0	136.4	596.6
147.0	136.4	596.4
148.0	136.4	596.2

149.0	136.4	596.0
150.0	136.4	595.7
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153.0	136.3	594.8
154.0	136.3	594.5
155.0	136.3	594.3
156.0	136.3	594.1
157.0	136.3	593.9
158.0	136.3	593.8
159.0	136.3	593.5
160.0	136.2	593.3
161.0	136.2	593.0
162.0	136.2	592.6
163.0	136.2	592.2
164.0	136.2	591.9
165.0	136.2	591.7
166.0	136.2	591.5
167.0	136.1	591.3
168.0	136.1	591.1
169.0	136.1	590.8
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171.0	136.1	590.5
172.0	136.1	590.6
173.0	136.1	590.7
174.0	136.1	590.8
175.0	136.1	591.0
176.0	136.1	591.2
177.0	136.2	591.5
178.0	136.2	591.6
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186.0	136.3	593.8
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262.0	136.3	594.0

263.0	136.3	594.0
264.0	136.3	594.2
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266.0	136.3	594.7
267.0	136.3	594.9
268.0	136.3	595.1
269.0	136.3	595.2
270.0	136.3	595.2
271.0	136.3	595.1
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277.0	136.3	595.1
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294.0	136.4	597.4
295.0	136.4	597.4
296.0	136.4	597.2
297.0	136.4	597.1
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301.0	136.4	596.5
302.0	136.4	596.1
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308.0	136.4	596.2
309.0	136.4	596.7
310.0	136.4	596.8
311.0	136.4	596.9
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313.0	136.4	596.7
314.0	136.4	597.0
315.0	136.4	597.2
316.0	136.4	597.5
317.0	136.5	597.7
318.0	136.5	597.9
319.0	136.5	598.2

320.0	136.5	598.2
321.0	136.5	598.0
322.0	136.5	598.0
323.0	136.5	598.1
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325.0	136.5	598.7
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335.0	136.5	599.6
336.0	136.5	599.4
337.0	136.5	599.1
338.0	136.5	599.0
339.0	136.5	599.0
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341.0	136.5	599.3
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351.0	136.6	601.6
352.0	136.7	601.9
353.0	136.7	602.1
354.0	136.7	602.4
355.0	136.7	602.7
356.0	136.7	603.1
357.0	136.7	603.7
358.0	136.8	604.5
359.0	136.8	605.1



Licensed WYKE-FM vs. Proposed WYKE-FM - Area of Gain