Comprehensive Engineering Statement

prepared for

Aleluya Broadcasting Network

K268CJ(FX) Conroe, TX

Facility ID 147295

Channel 241D 0.04 kW 85 meters AGL

Aleluya Broadcasting Network ("*Aleluya*"), licensee of FM Translator K68CJ, currently licensed in Livingston, TX (65.02 km distant) seeks to modify application File Number BPFT-20160729AHW for use with KJOZ(AM) in compliance with the recent "250-mile Window Waiver" under the FCC's *AM Revitalization Order*. The instant application seeks to change the frequency, ERP and antenna pattern of the proposed translator. *Aleluya* proposes to move the station to the tower with Antenna Structure Registration Number 1045592, which is Tower 2 of the KJOZ array, located at 30° 17' 39.2"N, 95° 25' 56.2"W. The proposed antenna is a Scala CL-FM single-bay antenna, vertically polarized, mounted at 85 meters AGL, oriented at 320 degrees, with 40 Watts ERP.

Allocation Considerations

The location of the 60 dBμ coverage contour of the proposed translator is shown in the map provided as **Figure 1**. As shown in **Figure 2**, the proposed translator coverage contour remains completely within the 2 mV/m KJOZ(AM) coverage contour and the 25 mile radius from KJOZ(AM), thus complying with §74.1201(j).

A study of nearby FM facilities on co-channel, adjacent-channel, and intermediate frequencies was conducted to identify which stations require further study to demonstrate compliance under §74.1204.

Protection of second-adjacent stations KHMX(FM) and KKHH(FM) is achieved pursuant to §74.1204(d) by demonstrating that the proposed translator's interfering contour does not reach populated areas. Both the KHMX(FM) and KKHH(FM) contour-method field strength is at least 64.80 dBμ at the proposed translator site. Thus, based on the -40 dB desired-to-undesired ratio specified in §74.1204(a)(3), the appropriate second-adjacent interfering signal level at this location is 104.8 dBμ. Using the distance from the proposed antenna and the proposed antenna vertical plane (elevation) pattern, predicted field strengths were calculated and plotted in **Figure 3**. As shown, a maximum field strength of 104.78 dBμ is predicted at the ground level at 130 meters from the base of the translator location. There are no residences or other occupied buildings within 215 meters of Tower 1 of the KJOZ array. Thus, considering the antenna height

and elevation pattern, the proposed translator signal does not reach the level of 104.8 dBμ that would be considered interference to surrounding population.

The proposed site is located more than 400 km from both the Canadian and Mexican borders, well beyond the coordination distances with either country. The nearest FCC monitoring station is 396.42 km distant at Kingsville, TX. This distance exceeds by a great margin the threshold minimum distance specified in §73.1030 that would suggest consideration of the monitoring station. The Table Mountain, CO Quiet Zone is 1408.31 km distant. The nearest airport is 6.65 km distant. There are no AM stations within 2.3 km.

It is therefore believed that the proposed facility satisfies all of the pertinent Commission Rules and Policies now in effect regarding allocation matters.

Environmental Considerations

The proposed facility will operate with a circularly-polarized ERP of 33 Watts with a single bay directional antenna at the top of existing tower ASRN 1045592. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. Because no change in structure height is proposed, no change in current structure marking and lighting requirements is anticipated. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission's rules.

Human Exposure to Radiofrequency Radiation

The proposed operation was evaluated for human exposure to radiofrequency energy using the procedures outlined in the Commission's OET Bulletin No. 65 ("OET 65"). OET 65 describes a means of determining whether a proposed facility meets the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET 65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

The general population/uncontrolled maximum permitted exposure ("MPE") limit specified in §1.1310 for the entire FM broadcast band is 200 $\mu W/cm^2$. For the purpose of this study, "public access" will be considered at the base of the tower at a location two-meters above ground.

Using the FCC's FM Model program and a worst-case EPA Type 1 antenna it was determined that the proposed facility would contribute a worst-case RF power density of 0.23 $\mu W/cm^2$ at two meters above ground level near the antenna support structure, or 0.1 percent of the general population/uncontrolled limit.§1.1307(b)(3) states that facilities at locations with multiple emitters are categorically excluded from responsibility for taking any corrective action in the areas where their contribution is less than five percent of the pertinent MPE limit. Since the instant situation meets the five percent exclusion test at all ground level areas, the impact of any other facilities near this site may be considered independently from this proposal. Accordingly, it is believed that the impact of the proposed operation should not be considered to be a factor at ground level as defined under §1.1307(b).

Safety of Tower Workers and the General Public

As demonstrated herein, excessive levels of RF energy will not be caused by the proposal at publicly accessible areas at ground level near the antenna supporting structure. Consequently, members of the general public will not be exposed to RF levels in excess of the Commission's guidelines. Nevertheless, tower access will continue to be restricted and controlled through the use of a locked fence. According to information provided by the applicant, appropriate RF exposure warning signs are posted.

With respect to worker safety, it is believed that based on the preceding analysis, excessive exposure would not occur in areas at ground level. A site exposure policy will be employed protecting maintenance workers from excessive exposure when work must be performed on the tower in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines would otherwise be

exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with all pertinent stations. Based on the preceding, it is believed that the instant proposal may be categorically excluded from environmental processing under §1.1306 of the Rules, hence preparation of an Environmental Assessment is not required.

Conclusion

It is therefore believed that the proposed facility satisfies all of the pertinent Commission Rules and Policies now in effect.

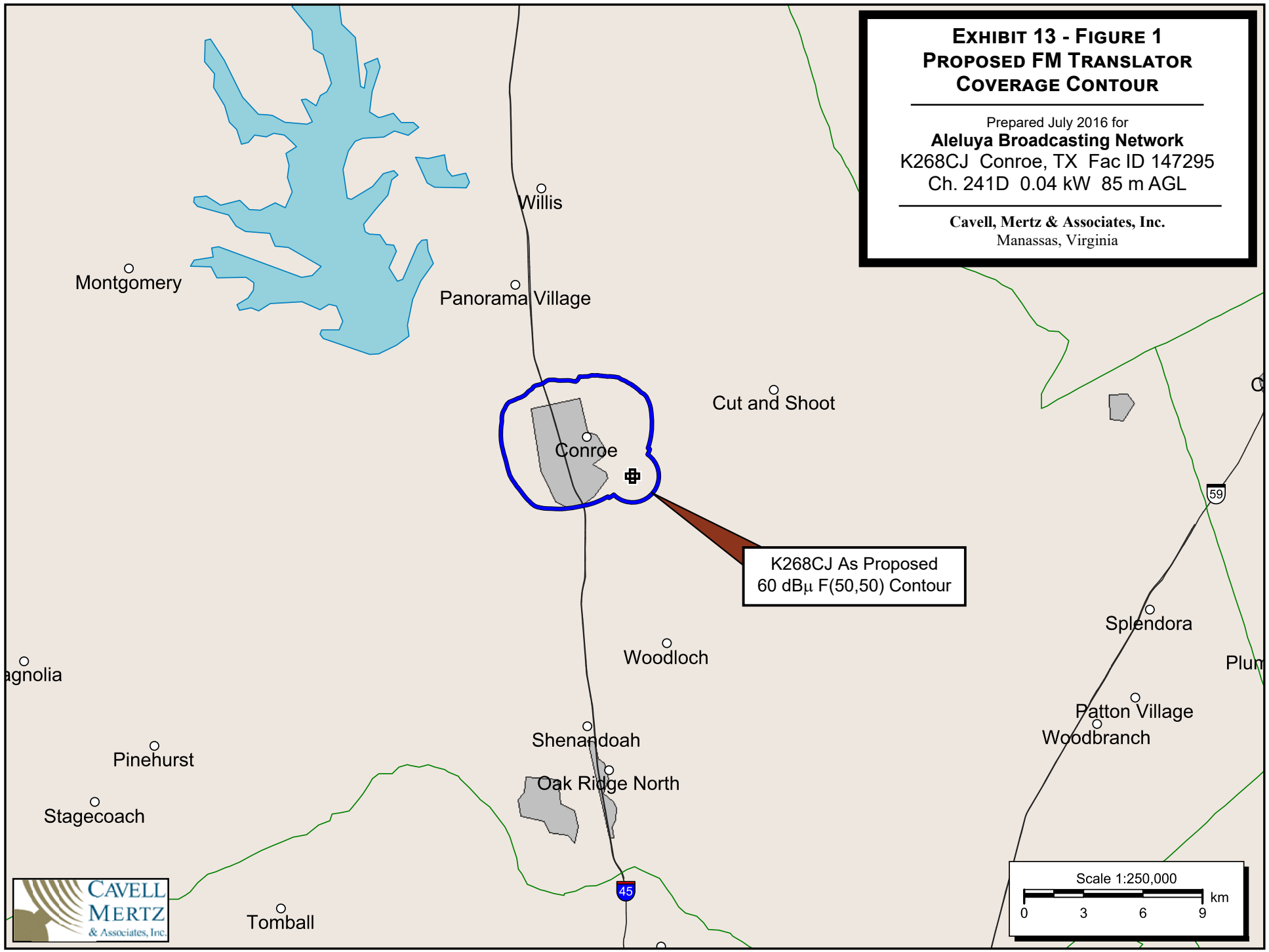
EXHIBIT 13 - FIGURE 1
PROPOSED FM TRANSLATOR
COVERAGE CONTOUR
Prepared July 2016 for
Aleluya Broadcasting Network
K268CJ Conroe, TX Fac ID 147295
Ch. 241D 0.04 kW 85 m AGL
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
Willis
Montgomery
Panorama Village
Cut and Shoot
Conroe
K268CJ As Proposed
60 dBμ F(50,50) Contour
Splendora
Woodloch
Patton Village
Woodbranch
Shenandoah
Oak Ridge North
Pinehurst
Stagecoach
Tomball
59
45
Scale 1:250,000
km
0
3
6
9
CAVELL MERTZ
& Associates, Inc.

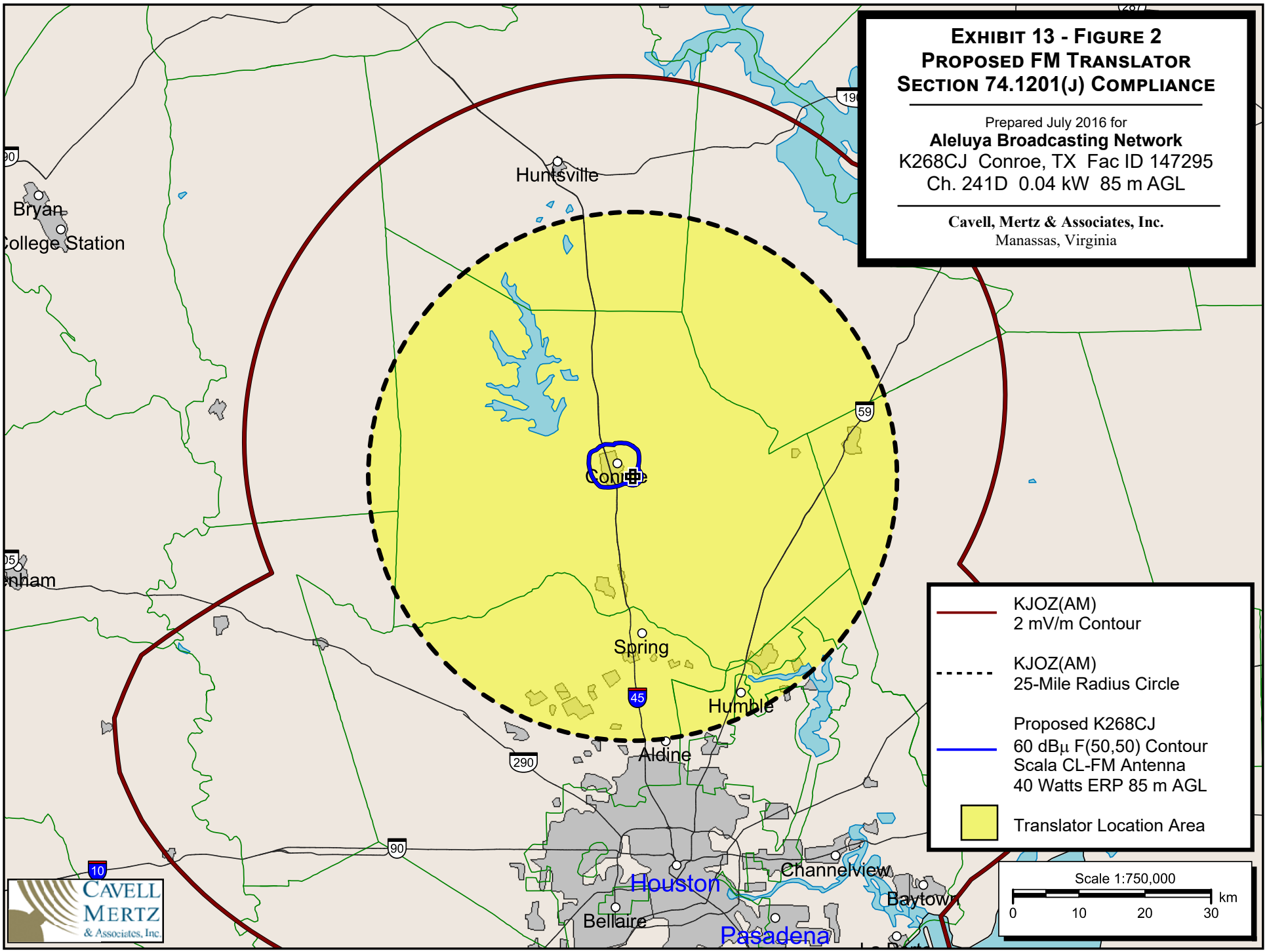
EXHIBIT 13 - FIGURE 2
PROPOSED FM TRANSLATOR
SECTION 74.1201(J) COMPLIANCE
Prepared July 2016 for
Aleluya Broadcasting Network
K268CJ Conroe, TX Fac ID 147295
Ch. 241D 0.04 kW 85 m AGL
Cavell, Mertz & Associates, Inc.
Manassas, Virginia
Huntsville
Bryan
College Station
Conroe
Spring
Humble
Aldine
Houston
Channelview
Baytown
Bellaire
Pasadena
KJOZ(AM)
2 mV/m Contour
KJOZ(AM)
25-Mile Radius Circle
Proposed K268CJ
60 dBμ F(50,50) Contour
Scala CL-FM Antenna
40 Watts ERP 85 m AGL
Translator Location Area
Scale 1:750,000
0 10 20 30 km
CAVELL MERTZ & Associates, Inc.

EXHIBIT 13 - FIGURE 3
PREDICTED GROUND LEVEL FIELD STRENGTHS

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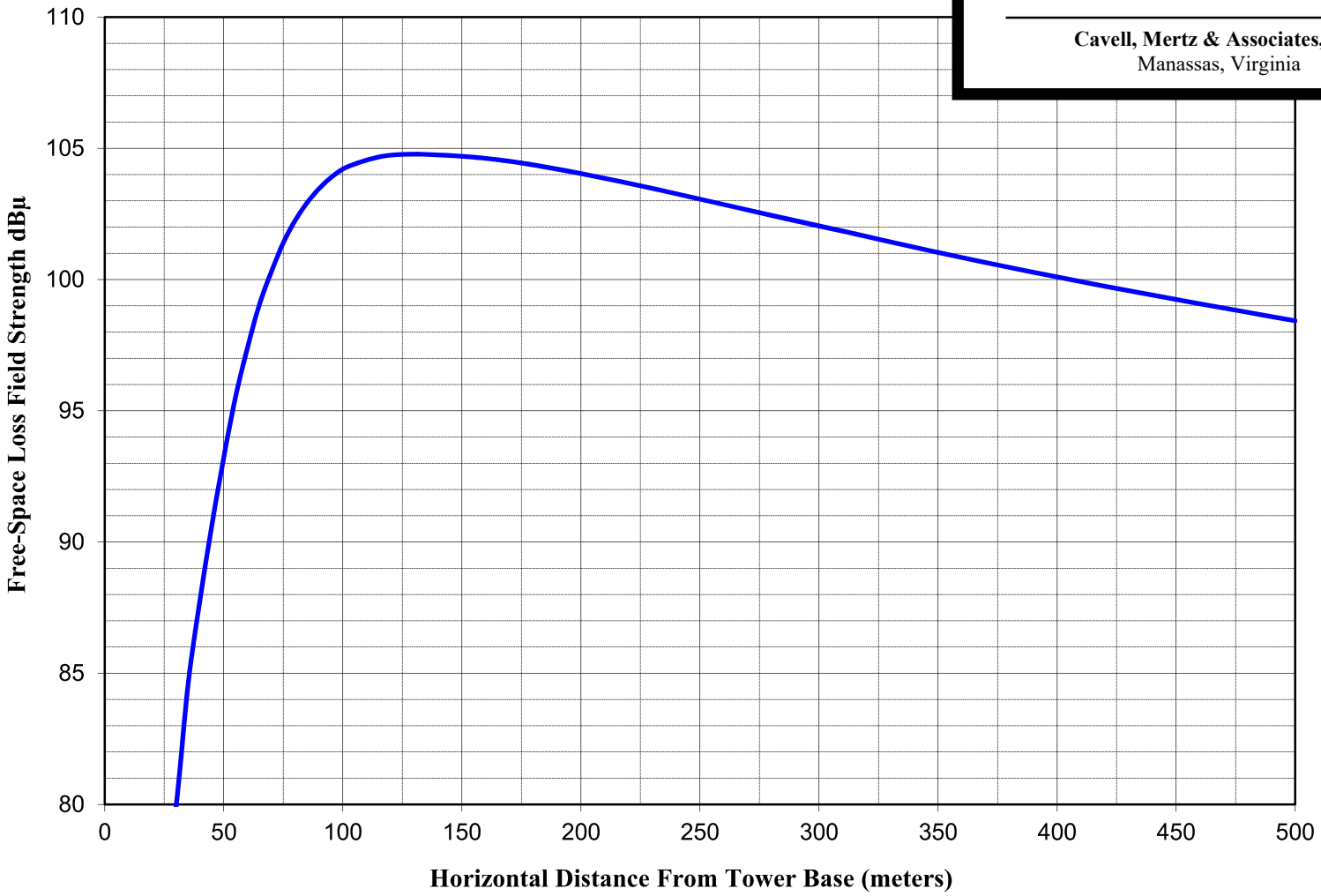
Cavell, Mertz & Associates, Inc.
Manassas, Virginia



CAVELL MERTZ & Associates, Inc.