LIEBERMAN & WALISKO
CONSULTING TELECOMMUNICATIONS ENGINEERS
703 YEATMAN PARKWAY
SILVER SPRING, MD 20902

960920WX - Mobile, Alabama

Figure 1

ENGINEERING STATEMENT

I ABSTRACT

This engineering report supports the application of TELEVISION CAPITOL CORPORATION OF MOBILE, Permitee of DTV television station 960920WX, requesting a construction permit authorizing the use of channel 23 DT in Mobile, Alabama.

This application proposes a change from channel 18 (494 - 500 mHz) to channel 23 (524 - 530 mHz) with an effective radiated power of 460.0 kilowatts utilizing a non-directional antenna at a height above average terrain of 533.6 meters. This is equivalent to 337.0 kW at 574 meters above average terrain. The use of this frequency with 337.0 kW radiated and 574 meters above average terrain is prescribed in Appendix B, FCC 07-138. The instant proposal moves the transmitter to a new location, 3.63 kilometers East and changes the ERP and HAAT to the equivalent parameters found in Appendix B, FCC 07-138.

This engineering report complies, in all aspects, with the pertinent sections of the FCC rules except where noted.

II RESPONSE TO FCC FORM 301 VII

Certification Checklist:

The instant application is submitted as being 100% compliant with the "check list" questions 1 through 5 with all answers in the affirmative.

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II RESPONSE TO SECTION VII OF FCC FORM 301 (CONT'D)

The proposed radiator will mount inverted hanging from the southeast corner of a candelabra top of a tower owned by American Tower Corporation. The coordinates for this structure are N 30° 36′ 40′ W 87° 36′ 27″

Paragraph 10:

The proposed radiator is a Propagation Systems model PSIUSMTD24DTL-23 (non-directional) with an overall power gain of 24.0 in the main lobe. Electrical beam tilt of 0.75° is proposed.

Figures 2-A, B, and C are furnished herewith to satisfy the requirements of this paragraph.

Paragraph 13:

The proposed construction will have no significant environmental impact and any FCC action with regard to this application would be categorically exempt from environmental processing under 47 C.F.R. Section §1.1306 of the rules. The instant proposed transmitter site does not fall into any of the categories specified in 47 C.F.R. Section §1.1307(a) of the rules. FAA dual intensity obstruction lighting is currently in use

Calculations performed using the procedures found in OST bulletin #65 ANSI guidelines show that the theoretical radio frequency radiation produced by the instant operation would not exceed the limits of radio frequency protection guidelines contained in the ANSI C95.1-1982 standard (American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 Ghz).

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II RESPONSE TO SECTION VII OF FCC FORM 340 (CONT'D)

Paragraph 13 (Cont'd):

These calculations assumed a worst case field factor of 0.1 which is higher than any of the values furnished by the antenna manufacturer from elevation angles of 10° to 90° below the horizon.

Utilizing the procedures found in the OST Bulletin #65, the level at ground level would be 0.0005 mW/cm^2. The ANSI allowable value of radio frequency radiation at this frequency is 1.7567 mW/cm^2.

Since the instant applicant will be a tenant on the tower structure, all climbers must coordinate their efforts with American Tower Corporation, the owner of the structure. A program is in place that controls the various antennas situated on the instant tower when the structure must be climbed. The instant applicant will participate in the safety program as required.

There is no easy access to the tower area by the general public. A security fence keeps out the general public. Additionally, warning signs are posted to advise of possible radiation hazards.

III METHODS EMPLOYED

All data and computations contained herein or upon which this engineering report is based are in complete accord with the pertinent requirements of the FCC rules unless otherwise specifically so stated.