



May 28, 2018

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Viasat, Inc., Submission of RF Shielding Test Report, Call Sign E160161, File Nos. SES-LIC-20161024-00853; SES-MOD-20170718-00770; SES-MOD-20180206-00088

Dear Ms. Dortch:

Viasat, Inc. ("Viasat") is authorized to operate an Earth Exploration Satellite Service ("EESS") earth station pursuant to the parameters of license Call Sign E160161 and subject to a condition to protect primary terrestrial fixed and mobile services in the 2025-2110 bands. In its original license application, Viasat submitted a coordination study recommending the construction of RF shielding to mitigate the potential interference to a certain terrestrial station tower location.¹ In connection with a currently pending modification application, Viasat submitted a supplement to the coordination study, which concluded that the same RF shielding previously recommended would be sufficient to protect terrestrial stations from the proposed modified earth station parameters.²

Viasat submits the attached test report confirming that it has completed construction of the recommended RF shielding and that the level of attenuation is consistent with the interference mitigation measures recommended in the coordination study.

Please contact the undersigned if you have any questions regarding this submission.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Daryl T. Hunter", is written over a solid black horizontal line.

Daryl T. Hunter, P.E.

CTO, Regulatory Affairs

¹ See IBFS File No. SES-LIC-20161024-00853, Narrative & Exhibit A at 6-7 (filed Oct. 24, 2016).

² See IBFS File No. SES-MOD-20180206-00088, Exhibit A, Attachment at 2 (filed Feb. 6, 2018).

PENDERGRASS TEST REPORT

NARRATIVE:

Exhibit A of Viasat’s FCC site license for the Pendergrass, Georgia ground station (FCC call sign E160161) is the “Frequency Coordination Study for Proposed EESS Uplink near Pendergrass, Georgia July 22, 2016” created by Hammett & Edison, Inc., Consulting Engineers. This report contains a recommendation to build a RF shield to provide at least 37 dB of attenuation between Viasat’s 5.4 meter antenna and a broadcast tower used for electronic news gathering located in Flowery Branch, Georgia. In April of 2018, Viasat completed construction of a RF shielding solid wall and conducted attenuation measurements. The results of the measurements show a measured value of 40 dB of attenuation, providing ample margin over the 37 dB objective in the aforementioned study by Hammett & Edison.

RF SHIELDING WALL

A metallic RF shielding wall was constructed between Viasat’s 5.4 meter antenna and Flowery Branch broadcast tower as shown in Figure 1 and Figure 2. The wall has dimensions of 9.1 meters high by 15.2 meters wide and was built in accordance to local construction regulations.



Antenna Side of Wall



Rear of Wall

Figure 1 RF Shielding Wall Construction

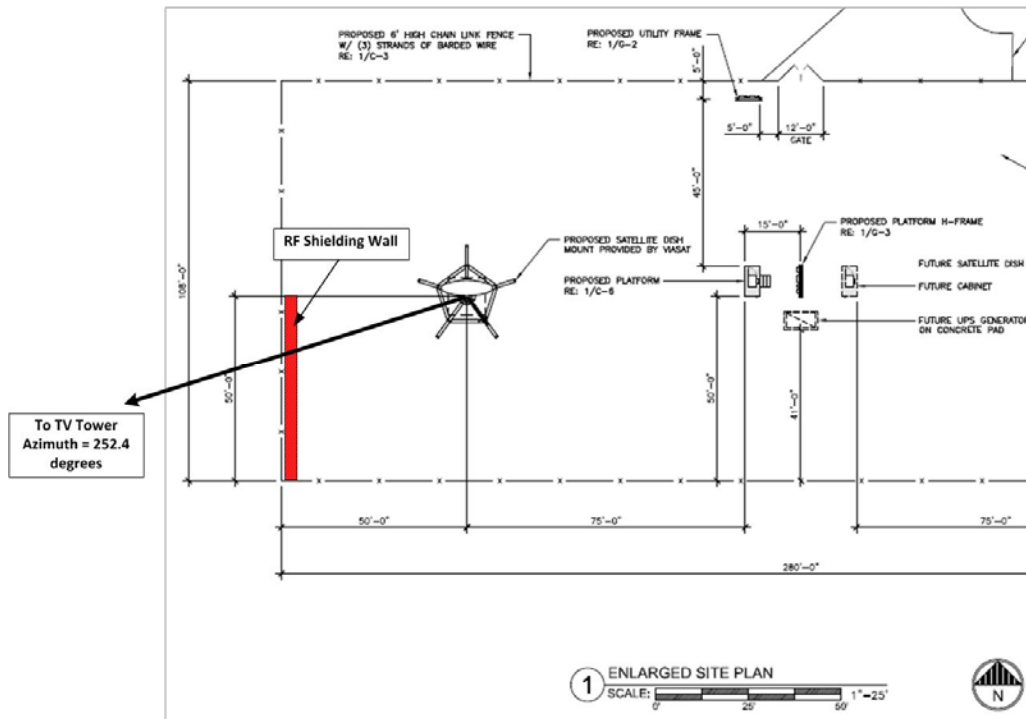


Figure 2 RF Shielding Wall Location Between Viasat Antenna & TV Tower

RF SHIELDING TEST

Testing was conducted on 19 April 2018 to verify that the RF shielding wall meets the value of 37 dB recommended in Hammett & Edison’s frequency coordination study. Viasat’s 5.4 meter antenna was pointed in the direction of the TV tower and measurements were made on both sides of the wall using a horn placed at the height of the maximum signal strength at the center of Viasat’s antenna as shown in Figure 3. Figure 4 is a plot of the measured signal strength showing that a value of 40.7 dB of attenuation was measured. The test procedure and test data sheet are contained in a separate document.



Measurement at Antenna Side of Wall



Measurement at Rear of Wall

Figure 3 RF Attenuation Measurements

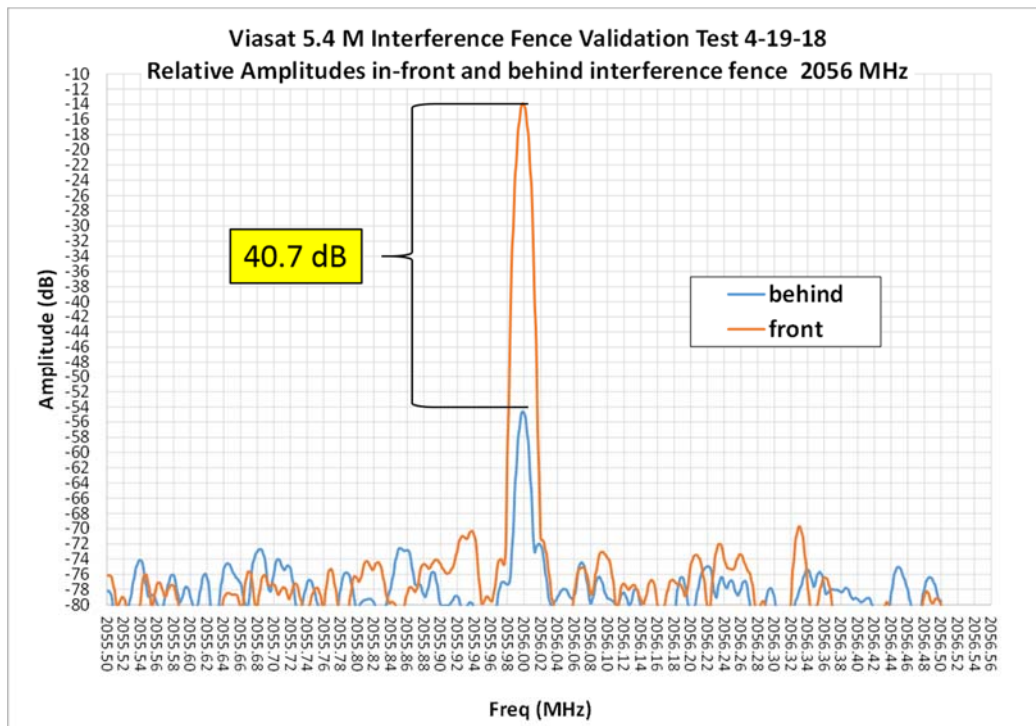


Figure 4 Measured RF Signal Attenuation