

**KATHREIN**  
**SCALA DIVISION**

June 17, 2004

**Antennas • Filters****Kathrein Inc., Scala Division**

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Broadcast Technical Consultant  
Lynchburg, VA  
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**Ref: Liberty University, Waynesboro**  
**File Number BNPFT-20030825ALM**

Dear Mr. Branch,

Thank you for the submission of your technical brief and antenna/tower drawing for the proposed installation of the Liberty University FM antenna system to be co-located with the directional pattern array of W246AN.

With the vertical spacing of 13 meters (~4 wavelengths) and the fact that your ½" transmission line will be attached to the tower leg, thereby shadowing its effect, we feel that your new installation will have no significant effect to the directional radiation pattern of the W246AN installation.

This opinion carries no performance guarantee and is based solely on the data provided by yourself and the practical experience of our sales engineers. It is by no means a comprehensive analysis and Kathrein-Scala recommends Liberty University FM to engage the services of a qualified communications consulting firm for a definitive evaluation. The furnished data has not been verified by Kathrein-Scala for completeness or accuracy.

If you need further assistance, please do not hesitate to contact me.

Best regards,



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