

# PIPER & MARBURY

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## BY FACSIMILE

Mr. William Jacobs  
EMS Technologies, Inc.  
660 Engineering Drive  
Norcross, Georgia 30091

Dear Bill:

I spoke this morning to Doug Young in the FCC's Office of Engineering and Technology. After briefly reviewing our STA request and Form 442, Doug had the following questions and comments.

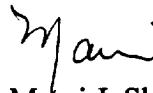
1. Why does EMS need so much power for a transmission distance of 50 meters?
2. A beamwidth of 39° would still allow for a very high ERP.
3. How does EMS go about determining channel selection?
4. How does EMS select frequencies between commercial channels?
5. What are the technical characteristics of the diffraction fence?
6. Does the diffraction fence keep the signal from radiating horizontally?
7. Is the testing of signals in an upward direction going to affect satellite frequencies?

Overall, Doug was concerned about the need for the seemingly high power levels and interference. While Doug did not study the proposal in detail, there are obviously

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some areas that need clarification. After you have had a chance to consider his questions, please give Randy or me a call so we can discuss how to satisfy Doug's concerns. We look forward to hearing from you.

Sincerely,



Marni J. Shapiro  
Legal Assistant

/mjs