

# SOUTHWEST RESEARCH INSTITUTE

6220 CULEBRA ROAD • POST OFFICE DRAWER 28510 • SAN ANTONIO, TEXAS, USA 78228-0510 • (210) 884-5111 • TELEX 244846

August 25, 1997

**Facsimile to: (202) 418-1918**  
Federal Communications Commission  
c/o Mellon Bank  
Attn: Wholesale Lock Box Shift Supervisor  
3 Mellon Bank Center  
525 William Penn Way  
27th Floor, Room 153-2713  
Pittsburgh, PA 15259-0001

Attn: Mr. Carl Huie:

Re: Formal Amendment  
File Number 5787-EX-MR-97

Dear Mr. Huie:

Thank you for your telephone call to Monica Trollinger this date concerning the above referenced application. I hope the answers provided below will be helpful.

*Question:* Why can't frequencies be used in a shielded room?

*Answer:* The equipment is too large for a shielded enclosure. These are whole vehicle tests. Some vehicles weigh 210,000 pounds.

*Question:* How frequently are we going to be testing?

*Answer:* Four or five times a year.

*Question:* Is this a sweep type of test?

*Answer:* No, these are discrete frequency tests.

*Question:* Why do we need so many frequencies?

*Answer:* These are the frequencies we have utilized in the past plus the specific frequencies that our clients requested.



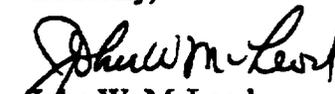
Mr. Huie  
August 25, 1997  
Page 2.

*Question:* How long is the dwell time?

*Answer:* Five seconds. If necessary, we can monitor the specific frequency before turning on the power so that we can do these on a non-interfering basis. We would hope that most (or all) of the frequencies could be allocated without having to go through the above monitoring.

Please consider this letter to be our formal amendment of the above referenced application. If you need more information, don't hesitate to call Monica Trollinger at (210) 522-2361.

Sincerely,

  
John W. McLeod  
General Counsel

:sem

cc: Jim Polonis

# SOUTHWEST RESEARCH INSTITUTE

8220 CULEBRA ROAD • POST OFFICE DRAWER 28510 • SAN ANTONIO, TEXAS, USA 78228-0810 • (210) 684-5111 • TELEX 244848

September 17, 1997

**VIA FACSIMILE (202) 418-1918**

Federal Communications Commission  
Attn: Mr. Carl Huie  
3 Mellon Bank Center  
525 William Penn Way  
Pittsburgh, Pennsylvania 15259-0001

**Re: File Number 5787-EX-MR-97; Southwest Research Institute**

Dear Mr. Huie:

Thank you for your request dated September 16, 1997 sent via facsimile to Monica Trollinger concerning the above-referenced file number. I hope the explanation provided below will be helpful in this matter.

In response to your request to provide formal justification for additional frequencies, most commercial clients have their own immunity test procedures. We do not know the basis for their requirements. However, we have data on whole vehicle immunity tests that identify susceptibility problems having resonance characteristics of a "Q" of 102. We believe the higher Q's can exist and can cause vehicle operational problems. The additional frequencies requested would give a reasonably high probability of detecting whole vehicle and subsystem immunity problems.

Some clients request full frequency sweeps for immunity testing. In an open area test site environment, this is not feasible and even if it were feasible, Southwest Research Institute as a responsible corporate citizen would not perform full frequency sweeps for immunity testing. However, we do recommend a balance between full sweeps and discrete frequencies by requesting additional frequencies. Generally, clients accept this. We feel fewer frequencies will not allow a comprehensive or good test since chances are those frequencies will not be at the equipment under test resonances.

If we can provide you with any additional information to help expedite this matter, please do not hesitate to contact Monica Trollinger via telephone at (210) 522-2361, or via e-mail at [mtrollinger@swri.org](mailto:mtrollinger@swri.org). Thank you for your prompt attention in this matter

Sincerely yours,



Louis Rodriguez  
Deputy General Counsel

Cc: Jim Polonis



SAN ANTONIO, TEXAS

HOUSTON, TEXAS • DETROIT, MICHIGAN • WASHINGTON, DC