

February 11, 2002

Federal Communications Commission  
Equipment Approval Services  
7435 Oakland Mills Road  
Columbia, MD 21046  
Attn: Diane Poole

**SUBJECT: M/A Com Private Radio Systems, Inc.**  
**FCC ID: OWDTR-0012-E**  
**731 Confirmation No.: EA800527**  
**Correspondence Ref. No.: 21915**

Dear Diane:

Submitted on behalf of M/A Com Private Radio Systems, Inc. is our response to items 2-5 referenced in your e-mail dated February 04, 2002 requesting additional information for the subject application.

1. The antenna pattern for the motorcycle unit equipped with a ¼ wave whip was investigated in both bands and the direction of maximum field strength was found to be at the back end of the unit in the same direction that the SAR was performed in. Therefore, it is expected that the SAR for positions other than the back end of the unit will be less than that reported.
2. The small motorcycle ground-plane may not be the final configuration. In order to perform an SAR measurement, a ground plane of less than a 20cm radius had to be used in order for the EUT to be placed parallel to the phantom surface and to prevent the surface of the ground-plane from touching the phantom surface. The small ground-plane used is representative of a motorcycle-mounted configuration.
3. The ground-plane used in the SAR evaluation is less than that of a vehicle rooftop. The antenna on the small ground-plane was tested for EIRP and the maximum antenna gain was found to be approximately -0.5dBi, which is consistent with the 0dBi stated by the manufacturer. It is assumed that the larger ground-plane such as the rooftop of a vehicle would only produce an approximate 0.5dB increase in antenna gain from the small ground-plane used.
4. The maximum size of the aluminum ground-plane is slightly less than ½ of a wavelength in all directions with a 15.0cm radius.

If you have any further questions regarding the above, please do not hesitate to contact me.

Sincerely,



Shawn McMillen  
General Manager  
Celltech Research Inc.  
Testing & Engineering Lab

cc: M/A Com PRS, Inc.  
Rhein Tech Labs