

## Washington Laboratories, Ltd.

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May 18, 2007

Mr. Rich Fabina American Telecommunications Certification Body Inc. 6731 Whittier Ave McLean, VA 22101

RE: Comments of April 27, 2007

APPLICATION: QP8EASITRAX Mars Electronics, Inc.

Dear Mr. Fabina:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in *bold italic*. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,

Steven D. Koster EMC Operations Manager

Brian J. Dettling
Documentation Specialist

1) The AC line conducted limits for a Part 15 intentional radiator are contained in Section 15.207of the FCC Rules. These limits are comparable to the Class B limits for a digital device. You cannot apply the Class A digital device limits to a Part 15 intentional radiator. The good news is that all the transmitter AC line conducted emissions comply with the 15.207 limits except the emission at 13.56 MHz. You must remeasure the emission at 13.56 MHz with the transmitter disabled and prove that the emission is coming from the Class A digital device (gaming machine). Alternatively, you may terminate the antenna with a resistive load so it doesn't radiate and contribute to the AC line conducted level at 13.56 MHz. If the emission is coming from the transmitter, AC line filtering will have to be added to the device and it must be retested.

R. The unit was retested as per the information above. Please see "EASITRAX Test Report revised.pdf".

WLL Project: 9554

2) Please confirm that this device will not be installed by the end user but by technicians or installers working under contract to the Grantee. Application of the FCC ID label by the end user is not permitted by the Commission.

#### R. The User Manual has been revised to clarify. Please see "EASITRAX User Manual Rev 1.pdf"

3) Both the occupied bandwidth plot and the frequency stability test data show the fundamental emission at 13.5603 MHz but radiated emissions in Table 5 show the fundamental at 13.587 MHz (which is not even in the fundamental emission band of 13.553 to 13.567 MHz of Section 15.225(a)). Please explain and correct as necessary.

#### R. Please see the revised report for corrected data.

4) Please provide a more detailed description of the pulse modulation and pulse repetition frequency (PRF) used by this device for normal operation and testing. The note at the end of Section 15.35(a) of the FCC Rules states for CISPR quasi-peak limits the PRF of a pulsed emission must be greater than 20 Hz or peak measurements must be made and compared to the quasi-peak limit.

# R. The Operational Description has been revised to address this. Please see "EASITRAX Operational Description Rev 1.pdf".

5) Please provide a new letter requesting confidentiality that references FCC Rule Sections 0.457 and 0.459. The confidentiality letter provided doesn't mention any rules.

#### R. Please see "EASITRAX Cover Letter - RFC Rev 1.pdf"

6) Please provide a block diagram that shows the frequency of all oscillators in the device in accordance with Section 2.1033(b)(5) of the FCC Rules. The diagram provided contains no oscillators.

#### R. A corrected Block Diagram has been supplied. Please see "EASITRAX Block Diagram Rev 1.pdf"

- 7) Please identify the loop antenna used for measuring emissions below 30 MHz. No loop antenna is listed in the test equipment shown on page 6 of the test report.
- R. Table 2 in the revised report has been edited to include the EMCO Active Loop antenna.
- 8) Please describe how the loop antenna was manipulated for making measurements below 30 MHz.
- R. The loop antenna was manipulated in the X, Y and Z axis per the data table.
- 9) Please confirm that the ferrite beads shown on the interface cables connected between the transmitter and the gaming device will be provided with the transmitter and provide installation instructions for them in the user's manual.
- R. Please see the revised user manual.

FCC ID: QP8EASITRAX