

American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

October 10, 2003

RE: FCC ID: OWDTR-0025-E

Attention: Daryl Popowitch / Kathy Grzovic

I have a few comments on this Application.

1. On a number of applications for the MASTRIII, even though different frequency ranges, it appears that the same boards or the same photos were used. Please verify that the photos are indeed the same device or that the photos are indeed specific to the application.

Response: The photos represent the EUT; the only difference between the frequency ranges are the component values.

2. Please separate the alignment procedure (Tune up) into a separate exhibit

Response: The alignment procedure has been uploaded as a separate confidential parts list exhibit, and has been removed from the revised Operational Description, also uploaded with this response.

3. The theory of operation states, "The collector output of Q203 adjusts the control voltage, Vct1 and Vct2. Please note that the collector of Q203 appears to produce control voltages to the low level amplifier U1 referenced as VCC1 AND VCC2. Since this is a control voltage the VCC designation may be correct. However, since it is not the name provided in the schematics, please explain.

Response: There was a typographical error in the theory of operation. Please refer to the revised exhibit uploaded with this response.

4. The manual states that MPE was calculated using the power limitations stated in 90.205, 90.309 or 90.635. This device operates in the 410 to 430MHz band. 90.209 refers to 90.279 for the ERP for base stations in the 421 to 430 MHz band. The maximum ERP for base stations in the 421 to 430MHz band is 250W. Please explain why this device is not subject to this rule part as it appears to operate as a base station in this band.

Response: MPE was calculated at the highest possible ERP for the overall frequency range.

5. FYI - Please note that the MPE states uncontrolled/general population limits were used to determine MPE, but the manual states that the device is not intended for this environment. Please note that all of the products have this discrepancy. Please explain.

Response: MPE was re-calculated using the limits for a controlled environment.

6. FYI – When listing the rule parts, it helps if not only the particular Part 2 section is listed but also the particular Part 90 section that is used to show compliance.

Response: Noted, we will comply in future reports.

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7. Emission Mask B item 3 states, "On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB." This means that at 2.5 times the authorized bandwidth the plot should show a limit of -13dBm. The plot on page 16 of the report does not agree with this rule. Please explain.

Response: During measurement, the channel bandwidth was used instead of the authorized bandwidth, which resulted in the final limit line ($43+10\log(P)$) not being displayed on the plot. Analysis of plot, however, shows that there are no unwanted emissions above the -13 dBm limit at 250% of authorized bandwidth.

8. Emission Mask C item 3 states, "On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB. This means that at 2.5 time the authorized bandwidth the plot should show a limit of -13dBm. The plot on page 18 of the report does not agree with this rule. Please explain.

Response: During measurement, the channel bandwidth was used instead of the authorized bandwidth, which resulted in the final limit line ($43+10\log(P)$) not being displayed on the plot. Analysis of plot, however, shows that there are no unwanted emissions above the -13 dBm limit at 250% of authorized bandwidth.

9. Please indicate which emissions designators are 90.210.

Response: The 90.210 emissions designators are indicated in Section 14 of the report, Necessary Bandwidth and Emission Bandwidth.

Dennis Ward
mailto:dward@AmericanTCB.com

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination.

Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.