



American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

March 31, 2004

RE: M/A-COM Inc.

FCC ID: OWDTR-0022-E

After a review of the submitted information, I have a few comments on the above referenced Application.

Administrative/General:

- 1) External photographs appear to be missing the front of the unit. Please provide.
- 2) The RF exposure appears to be calculated using 35 W, while the maximum measured appear to be 36.4 W. Typically, the RF exposure should be calculated using worse case power. Please explain and/or correct. Note that this may affect the distances documented in the users manual.
- 3) Also in regards to RF exposure, 90.205(q) should be accounted for in MPE evaluations, i.e., compliance distances should be determined according to allowed 20% over nominal power, unless radio is documented to not support such levels. Please explain and/or correct as necessary.
- 4) The label mentioning occupational exposure appears to be placed on the back of the unit in a position that is not seen by the end user. The FCC rules state that the Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. If the label not visible after installation, please explain how the user is made fully aware of the potential for exposure, given the user may not necessarily be the installer.
- 5) The manual(s) appear to be missing information regarding co-location, i.e.: "This device must not be co-located or operating in conjunction with any other antenna or transmitter."

Technical:

- 7) Please confirm that the digital device and RX portions of this equipment have been verified for compliance under Part 15 requirements. Additionally, information regarding this fact was not found in the users manual. Please provide an updated users manual as necessary for Part 15 compliance statements and prohibition against modification, etc.
- 8) Please provide an attestation/explanation of compliance to 90.203 (e)/(g).
- 9) Please justify the use of a 2851 Hz signal for modulation purposes listed in several places in the report (i.e. pages 12, 16, 18) while the plots are typically labeled 2500 Hz.
- 10) Please explain why the EA mask was only applied to the 2-Level, wideband, 9600 Modulation in the 806-821 and 851-866 Bands. Please explain why the masks G & H are not necessary for these bands as specified by 90.210. It seems the device may also apply to mask G, but it appears that these waveforms may not meet the G masks requirements.
- 11) If possible, please provide a test for all appropriate masks within each sub-band 806-821, 821-824, 851-866, and 866-869 MHz.
- 12) A careful look at Plot 8-8 shows one sidelobe which exceeds the limit.

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Examining Engineer

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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.