



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

November 4, 2003

RE: ICOM

FCC ID: AFJ268500

I have a few comments on this Application.

- 1.) The RF Exposure exhibit is an excellent example of advice to consumers that must be included with this product when marketed. However, the purpose of the Exhibit is also to "show the math" and provide justification – even if through just MPE estimation - of the claims presented in the Manual. Kindly provide Section 6.6 as a separate Exhibit and upload to the AmericanTCB.com website for forwarding to the Commission.
- 2.) Please provide additional details of the G2B emission. An occupied bandwidth plot of typical DSC emission is expected. Please provide an attestation referring to "ITU-R Recommendation M.493-9 for DSC" (IEC 61097-3), if appropriate. Your explanation for the 16K0G3E is acceptable.
- 3.) It is customary to provide the frequency vs. temperature data as a plot. This will aid in the review of your test data.
- 4.) It is customary to provide the modulation limiting data as a plot. The accepted FCC methodology is simpler than that which you have presented. First find an audio input that will give a 50% modulation reference (2.5KHz) to use as a 0dB audio reference. Next step in 5dB steps from -20dB to +20dB of the indicated audio reference. Repeat for both 300 and 3000Hz audio input using the identical audio steps found using the 1KHz reference. Please plot the resulting data on a deviation vs. input (in dB).
- 5.) TIA/EIA 603 is used as the standard for testing all analog FM transmitters not just for FCC Part 80/90, but for Canadian radio standards RSS-119 and RSS-182. Consequently the measurement bandwidth settings for both transmitter conducted and radiated spurs should conform to Section 2.2.13. Note: Neither the 120KHz CISPR BW, nor the 300KHz RBW are appropriate for this transmitter work. Please address.
- 6.) The Occupied Bandwidth plots 1 through 4 in 6.5.10 do not conform to the recommended measurement practice in 2.2.11 Table 16 or 47CFR Part 80. It also does not match your indicated procedure in Section 8.4 of your Test Report. Please address.
 - a. FYI: It would be helpful to make all your Occupied BW Plots on a common span. May I recommend 100 KHz?
- 7.) Please provide addition comments on the radiated Tx spurious using the substitution method. Specifically:
 - a. Since a horn antenna is used above 1GHz, what precautions are taken to insure the source and load are properly matched?
 - b. Is the forward and reflected power taken into account to find the "for real" power loaded to the antenna?
- 8.) Was the transmit channel list specified in Section 8 of the Users Manual verified?
- 9.) In addition to a Parts List, all Licensed radio transmitters are required to submit a Tune Up Procedure. If it is already uploaded under a separate document name, my apologies – simply indicate the document name and where it can be found.
- 10.) FYI: Ideally the microphone cord should always be stretched vertically above the EUT during radiated spurious emission testing. This is to insure that emissions are maximized..

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President and 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.