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

April 21, 2003

RE: FCC ID: CNTPP2080
Attention: Rick Candelas
I have a few comments on this Application.

1. Please note that there is more than sufficient room for the 2 condition statement required in 15.19 to be placed on the outside of the laptop. Please provide a sample of this label and a dwg showing where it will be located on the device.
2. Please note that your report shows the spurious radiated meter readings then a corrected readings but does not show the factors used nor the manner in which the corrected readings were obtained. Please provide these factors in the tables.
3. Please note that page 13 of 47 (pdf page 32) of your report states the 2387.73MHz is a peak reading that are over the 54 dB 15.209 limit. While you have shown 2390 Averaged reading, you have not made it clear if this is the same frequency as 2387.73 MHz. If this is the same frequency please be aware that this is a 2MHz difference and may be too great a frequency variation to be considered reliably the same frequency. Please show compliant averaged data for the frequencies measured in the restricted band of 2310-2390MHz.
4. Please note that the antenna specs state the antenna is for 2.4 GHZ and 5 GHz operation. The application and documentation justifies 2.4GHz. Please verify that the antenna is only for use in the 2.4GHz range.
5. Please provide the correct SAR report for this device. Page 2 of the SAR report states the device is FCC ID: E2K24CLNS. Please note that the FCC ID for this application is FCC ID: CNTPP2080. Please also verify and correct all SAR documentation to reflect the proper applicant information for this device.
6. Please note that the power levels between SAR and EMC reports cannot be greater than 5% (FCC OET Supplement C SAR evaluation checklist). The power reported in the SAR report is 17.8dBm (60mw) while the power in the EMC report is 16.75dBm (47mw). This is a 20% difference. Please remember that according to the FCC SAR checklist, when there is a less than 5% difference, the SAR report must be the higher. Please remember that each application MUST stand on its own merit and that assumptions cannot be made by a TCB. While the FCC may have given the SAR lab and/or the manufacturer verbal approval for this action to be taken, there is nothing in writing from the FCC attesting that this action is allowed. Please also remember that verbal statements made between manufacturers, labs and the FCC cannot be used by the TCB for approval processes. A TCB is limited in what it can and cannot do in this regard. **You have two options. You can retest the device for SAR or EMC or both using power levels within 5% in both the EMC and SAR report: alternately, you can provide written objective evidence from the FCC stating that such a large variation between SAR and EMC is allowed by the FCC.** Again, please remember that each application MUST stand on its own merit and that each application must contain the appropriate exhibits.
7. **FYI – no action needed**. Please note SAR testing for hands, wrist, feet etc is superfluous and is neither needed nor desired for laptop computer configurations (see item 14d of the OET TCB SAR checklist). Also, please note that the FCC has not released an appropriate test or evaluation procedure for this type test and as such does not allow TCBs to evaluate this test. Also please remember that verbal communication, closed door committee meetings or other no published comments between the lab and the FCC has no validity at this time in the certification process as there is no objective evidence of such conversation. Since this test is not needed, since there are no procedures established by the FCC for this test and since no objective evidence exists from the FCC that a TCB can evaluate this type of SAR measurement, it will be ignored in the evaluation. The only SAR values to be listed on the grant will be those that the TCB is allowed to evaluate.
8. **FYI – no action needed**. Please note that since Crest Factor is not the same thing as Duty Cycle it is not clear what is being referenced on the plots when it stipulates “Duty Cycle”. Crest factor is the ratio of peak value to RMS value of a waveform. Basically speaking Crest Factor (peak-to-

RMS ratio) = (peak value)/(RMS value). Duty cycle is more appropriately the time on versus the time off or t/T for a pulsed waveform. Duty Cycle usually deals with consistent or repeatable wave forms of simple pulsed natures. Crest Factor usually deals with more 'dynamic' wave shapes. Consequently, duty cycle is an inappropriate designation when Crest Factor is what is being requested. For this application however, the duty cycle and crest factor are both 1.

Dennis Ward
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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.