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

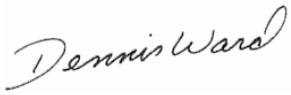
April 13, 2005

RE: FCC ID: SURAS20_ATCB002295
Attention: Douglas Barnes

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. It appears that you have only provided a photo of the antenna used with the device. Please provide an external photo of the EUT.
2. Please provide the required internal photos of the top and bottom of the transmitter itself. Please make sure that all shielding is removed in the photos.
3. Please provide an internal photo of how the boards fit into to housing.
4. Please provide a photo or drawing showing where the FCC ID label will be located on the device.
5. Please note that WLAN devices in the US must operate between channels 1-11. The frequency range is between 2412 and 2462MHz. Please correct the 731 and RSP100 to show this frequency range.
6. Please note that the IC designation on the RSP100 for this device should be "Spread Spectrum Device (2400-2483.5 MHz)" and not Wifi device. Please correct.
7. Please provide the proper emissions designator on the RSP100. The IC requires this information. The designator last three characters would be G1D. The first set would be the emissions bandwidth information. For example only 18M6G1D etc.
8. Please note that while you have provided an operational description of the "Communication Board" you have not provided an operational description of the transmitter. Please provide an operational description of the WLAN transmitter.
9. Please note that the setup photos of this device clearly indicate that it is a mobile rf configuration and not a fixed antenna configuration. Please provide an MPE calculation report for this device showing compliance to the 20cm separation requirements. Alternately, please show how this device uses a fixed antenna and not the short 1.4wave dipole type antenna shown in the setup photos.
10. Please note that the term PC (Personal Computer) used in the manual indicates that this device is possibly for home use. Please justify the Class A EMC designation for this device.
11. Please explain why you are comparing the fundamental frequencies on page 4 of the document "Channel 1 data with radiated emisions pages 1-15.pdf" to the 54dBuV/m spurious emissions limits. Please use the FCC approved DTS test methods for determining compliance to the fundamental emissions. These test methods can be found in the latest DTS test methods or in FCC 97114.
12. Please note that pages 1-8 of the above document show many peak readings over the 54dBuV/m readings but there are not average readings showing compliance to the limits. Please provide compliant data showing passing readings when compared to the appropriate peak and average limits. Please follow the approved FCC test guidelines.
13. Please explain what the plots on pages 9 through 15 of the above document are. Some appear to be power plots, some appear to be PPSD, and some appear to be band edge. However as they are not clearly identified, it is not possible to determine what they are and if the are to be used in determining compliance or to what section of the rule they are to be used to determine compliance. Please note that ANSI C63.4 2003 states that the test report and subsequent data is to be clear and unambiguous. Please provide a report that clearly identifies the rule part, the limits and the test method used for each required test.
14. Please note that the documents "Channel 5 data with radiated emissions pages 16-28.pdf" and "Channel 11 data with radiated emission pages 29-43.pdf" appear to show the same type problems and errors as mentioned in items 8 through 10 above. These documents show failing data with no compliant data to support otherwise. Please present a report that is clear and unambiguous in the presentation of data.

15. Please explain and provide a test report to presents ERP data a clear manner. Please include an explanation as to the method used to determine ERP values. Please also note that the FCC has stated that when possible conducted power measurements are to be made. Please note that as the antenna is removable on this device, conducted antenna power measurement appear to be possible. Please explain why this was not done.
16. Please note that the mathematical difference between ERP and EIRP is only 1.64 numeric or 2.148dB. Please explain why you have a difference in ERP and EIRP values ranging between 2.4 and 4 dB in the document "ERP and EIRP calculations".
17. Please note that it appears that you have only provided the schematics for the control board and have not provided the schematics for the WLAN transmitter. Please provide the schematics for the WLAN transmitter itself.
18. Please provide the block diagram for the WLAN device. The only block diagram provided is to the control board.



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.