

November 25, 2003

RE: FCC ID: PL6-BTS-R3_ATCB000941 Attention:

I have a few comments on this Application.

- 1. Please note that the file "40-00179-00(A) Calibration Verification Procedure (1.20).doc" is password protected. Please unprotect the document so it can be reviewed.
- 2. The photo of the label is not clear. Please provide a sample label that is readable.
- 3. Please note that the only items on the confidentiality request are schematics and block diagram. Please note that the tune up procedures are not listed as confidential and will be open of rpublic view. If the tune up and cal procedures are considered confidential, please provide a new confidentiality request document to include these items.
- 4. Please provide the parts list for this licensed device. Please include this parts list on the confidentiality request if the exhibit is to be confidential.
- 5. Please note that the operational description states that a maximum of one watt will be delivered to the antenna port. Please note that the MPE calculations and other documentation state that 38dBm will be at the antenna port. Please explain. Please make the documentation consistent.
- 6. Your MPE report says the MPE is approximately 0.099 mW/cm², however, you have used time averaging in an uncontrolled general population environment. Time averaging is limited to the use in controlled Occupational environments. Souse based averaging can be used in uncontrolled environment calculations. Please correct your MPE report to calculate the MPE based on the appropriate environment allowed averaging. Please see 2.1091(d)(2) for help.
- 7. Please note that your MPE report only shows the 12dBi gain calculations. The installation manual indicates that a 17dBi antenna can also be used. Please provide the MPE calculations for this antenna or please explain why it is not needed.
- 8. Please note that the installation manual (page 8) states 20cm separation,. However, the calculated safe distance is significantly greater and the MPE report states 200cm separation distance. Please correct the manual and all other documentation to reflect the same separation distance. Please make sure that this distance is accurate.
- 9. Please note that according to 2.1033 "The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range" is to be provided at the time of certification. While I have found general specification on the device the above information is not evident. Please provide the dc voltages and currents into the final amplifier stages of this device.
- 10. Please note that on the summary of test page (page 4) you have stated the frequency tolerance section instead of the emissions bandwidth section. Please correct.
- 11. Please note that while a diagram of the rf power test and antenna spurious emissions is shown, no information on the actual method used is given. Please provide an explanation of the test procedure used to perform antenna conducted power measurements and antenna conducted spurious emissions measurements. Please include sample calculations of affecting parameters (how are these parameters included?).
- 12. Please note that on pages 8 and 9 of the report you have provided a temperature stability plot that is more than a year old for the Occupied Bandwidth. Please explain.
- 13. Please note that radiated spurious emissions (out of band emissions) for part 21 devices are EIRP values. Please note that your report shows ERP values. Please correct your report to show the required values in EIRP.
- 14. Please note that conducted power measurements and antenna spurious emissions were made using a directional coupler (see page 32 and 33 of the report). Since the accuracy of the attenuation of the coupler has a direct bearing on the accuracy of the data, the directional coupler must be calibrated (i.e. factory attenuation data is not appropriate). Please show the calibration date of this measurement device. Please show how this factor is included in the data.

• Page 2

November 25, 2003

Dennis Ward

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.