



NATIONAL TECHNICAL SYSTEMS, INC.

www.ntscorp.com

Nick Kobrosly
AETL Testing Inc.
c/o National Technical Systems (Calgary)
5151 – 47 Street N.E.
Calgary, AB CANADA T3J 3R2

August 23, 2005

American Telecommunications Certification Body, Inc.
6731 Whittier Avenue
Suite C110
McLean, VA 22101

RE: Certification Application
FCC ID: TJ6PR0345

Please find below responses to your questions regarding the above application, if you have any further questions or concerns, please do not hesitate to contact me at 403-568-6625 or Glen Moore at 403-568-6605 x223.

- 1.) FYI: My apologies on the length of time it took to get these comments back to you. But there were a couple of issues that did arise which need to be addressed.

[Response: No problem.](#)

- 2.) Testing for this 125 KHz device appears to have been done in a 10M semi-anechoic chamber. I can find very little public information to show how a chamber will react at these very long wavelengths. This is not to say the data was taken incorrectly, but there is very little I can find to indicate how any chamber will or should react at these frequencies. This does call into question not only the fundamental but all spurious emission measurements below 30MHz. In addition, this also could potentially affect the published uncertainty budget. I am loathe to ever requiring any unnecessary testing from any laboratory, but for this case I need some assurance that the measurements are performed properly. Kindly provide some additional correlative data showing that these measurements are still valid, especially since 3M measurements were extrapolated to 300M. I will accept either retesting on an OATS or manufacturer's data on typical chamber performance.

[Response: The measurements were performed in accordance with ANSI C63.4, which is referenced by the FCC and IC. Section 5.3 of ANSI C63.4 specifies that measurements on a ground plane may yield a higher emission level \(worst case from compliance perspective\). It does not preclude the use of another facility provided it meets the requirements of Figure 5. There is no site attenuation or OATS requirements below 30 MHz; I.E. a ground plane is not required, but an obstruction-free zone per Figure 5 is a must, which our testing facility does meet.](#)

- 3.) The Manual is identified as "confidential" on the face page. Please bear in mind that a Manual is rarely ever allowed to be a confidential document. In addition, this seems to be only a portion of



the Manual with much information missing. One of the most important issues is being certain that the end user does not have any access to any controls which will permit operation in unauthorized frequency bands. Kindly provide a more complete Manual.

Response: Confidentiality was not requested for the manual. The manual will be updated to remove the word "confidential" from the cover page. An updated manual will be uploaded shortly.

- 4.) The label for this device should display the 15.19(a)(3) statement on the device. In addition, the "FCC Logo" only applies to devices which seek Equipment Authorization using the Declaration of Conformity process. See 15.19(b) as well as Part 2 of the Rules for further information.

Response: The statement from Sec. 15.19 will be added to the device. The FCC Logo is added because the customer is classifying the digital unintentional portion under FCC Part 15 Class B. This has no bearing on the certification of the intentional radiator except the customer wishes to reflect the DOC in the same report.

Sincerely,

Nick Kobrosly
Director of Operations
NTS Calgary
On Behalf of Estech Systems Inc.

