

American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

November 5, 2003

RE: Long Range Systems

FCC ID: M74T1505

I have a few comments on this Application.

- 1.) No External Photographs were uploaded with this filing. Please provide.
- 2.) External Photographs must also show equipment with no RF shielding. Please remove copper tape.
- 3.) External photographs are also too small to be useful. Please supply larger and clearer photos. Please indicate the location of the antennas.
- 4.) If copper tape is to be used for the shielding of all production products, please provide attestation. If copper tape was added during testing, it should be noted in the report.
- 5.) Please provide information as to the content of the transmitted intelligence in the POSCAG emission.
- 6.) The Block Diagram contains too few details. Please review 2.1033(b)(5). Please note our main concern is of the RF portion of this device.
- 7.) Please indicate which sheet of schematics contains the RF portion of the transmitter.
- 8.) Your radiated test results show a comparison between Quasi-Peak and Average. This is incorrect for 15.231. You should be comparing Peak and Average. See 15.35(c) and 15.31. Please review your measurements.
- 9.) In addition. You should be providing test information for all the timing information required under 15.231(1), 15.231(2).
- 10.) The HP 8568 listed in your equipment list is specified by the manufacturer [HP Test and Measurement Catalog, 1994] to just 1500MHz. Please explain how data was taken to the 10th harmonic (4.7GHz).
- 11.) The Operational Description indicates this equipment operates on 12.5 KHz channel spacing. But the Form 731 seems to indicate that only a single channel is used. What is the frequency range of this device? Please be mindful that the requirements of 15.31(m) may affect the number of channels selected for measurement.
- 12.) No confidentiality request letter was uploaded with the filing. Are their no Confidential exhibits?
- 13.) Please note that for all Part 15 Certifications, a Parts List is not required but as an option can be supplied. Do you wish for the Parts List to be posted to the FCC website?
- 14.) The Manual indicates this is a .25W transmitter. This is easily in excess of the limits for 15.231. Please revise.

William H. Graff

President and Examining Engineer

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MUMAL

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.

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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.