

## American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

November 14, 2002

RE: AMCO Automated Systems

FCC ID: G8JVRT01

After a review of the submitted information, I have a few comments on the above referenced Application.

- 1) The block diagram should show the frequencies of all oscillators in the device (CFR 2.1033(a)(5)). Please provide an updated version that includes this information.
- 2) The device contains two different antennas, but it is not clear which one is which. Please provide an additional photograph that labels the Receiver and Transmit Antennas.
- 3) The Technical description discusses an AFC state that is a quasi-TX state. Please provide more information regarding what this state is. Is this state expected to meet the requirements of 15.231(a) or (e)? Also, please explain how this mode meet the timing requirements necessary for its requirements.
- 4) The Technical description states that the transmitter operations from 414.5 415 MHz, while the users manual states 413.5 414.55 (page 12 of 18). Please explain which is correct and correct the appropriate exhibits.
- 5) The users manual page 12 of 18 appears to list the FCC ID of a different product. Please correct or add the current FCC ID to the manual as appropriate.
- 6) Please provide a theory of operation regarding transmission duration & TX time etc. Please explain how often the device transmits. Does it ever repeat its transmission? If so, how many times and how often? Does it only transmit once for each interrogation? Does the transmission duration ever change, or is the 15 ms stated in the report worse case? If multiple packets are transmitted in < 1 second, what is the period between transmissions? Also, please provide a plot over 5 seconds that shows that the total transmission time does not exceed 1 second. If the device repeats its packets in a reasonable period of time (< 45 seconds), please provide a plot that shows this as well.
- 7) Table 3-1 & 3-2 appear to show average measurements. Since actual average measurements are not allowed for pulsed emissions, but only duty cycle correction of the QP/PK reading, average "measurements" should not be provided as they confuse the test data. Also, please note that some of these average measurements also appear to exceed the average limits.
- 8) The test report did not provide any measurement data for > 1 GHz. Please explain the highest frequency measurement scans were made to. Where any measurable emissions seen for the 3<sup>rd</sup> and 4<sup>th</sup> harmonics?

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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.