



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

February 16, 2005

RE: Davis Instruments, Corp.

FCC ID: IR2DWW6345

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

- 1) System receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals (15.247(a)(1)). Please provide information that shows this device complies with this.
- 2) This device shall use a pseudorandomly ordered list of hopping frequencies. Please explain how this device accomplishes this and also provide sample hopping tables (minimum of 2 if the device is capable of having multiple hopping tables).
- 3) Please provide information showing compliance with 15.247(g)/(h).
- 4) The test report mentions a normal transmission only occurs every 2.5 seconds. Please provide theory of operation to confirm worse case timing and design of the system. Note the test report mentions 7.5 ms TX period per channel.
- 5) The averaging duty factor is states as 7.5 ms TX period, however other test data (equal use on the average) shows the device can transmit up to 465 mS per hop. This would not allow any duty cycle correction and would cause many of the results show to be in excess of the limits for average emissions. Please explain/correct as necessary. Additionally, it is expected that the worse case theory support the measurements as well.
- 6) Please include a tunable list of frequencies. The user manual appears to state only 8 channels are used but this appears different in the report.
- 7) It appears from the users manual (page 5) that the device uses only one channel at a time. If so, how is this considered to be FH?
- 8) How does the test mode comply with the FHSS requirements.
- 9) Please consider adding a statement to the users manual to explain to the user that the device has been evaluated to meet the FCC RF exposure requirements.

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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.

