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FAX TRANSMISSION

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This fax consists of ____ pages (including this cover page).

TO: **Errol Chang**
COMPANY: **FCC Application Processing Branch**
FROM: **Don Hume**
DATE: **April 27, 2000**
SUBJECT: **FCC ID: HCQ3B6ESL**

Correspondence Reference Number: 13621
731 Confirmation Number: EA97168

The following notes to the original submission should help to tie the test data to the relevant rule sections. If there are further questions on this submission, please contact me directly:

> Don Hume
> Inovonics Corporation
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We will try to use this format to address specific rule sections in future submissions of the FA series transmitters.

Additional Notes To FCC ID: HCQ3B6ESL
April 26, 2000

The following notes address the requirements of 15.247.

15.247(a)(1) Hopping Sequence and 15.247(g) Occupied Band: The 25 hopping channel sequence is listed in Figure 2 of the Detailed Technical Description. In the table, sequential steps 1 through 25 are tied to channel number. A single packet contains the complete message and the Receiver "captures" the transmitter on any of the 25 channels and performs equally on all channels. Each packet transmitted advances the sequence number one position before the next packet is sent, so that on average, all channels are used equally.

The channels are spread at intervals over the occupied band. The occupied Bandwidth and channel spacing plot shows two adjacent channels in the center of the occupied band. Both plots were taken from a test sample specially modified to repeatedly step through the pseudorandom sequence. Because the packet length is short, the occupied band plot had to be run for many complete cycles of all 25 channels to get a completed occupied band plot.

15.247(a)(1)(i) Maximum Dwell Time: To minimize clash in this asynchronous one-way system, the delay time between packets is randomized by a function tied to the unique transmitter ID.   The standard packet length is 28 mSec as measured in the time domain plot on page C2 of the test report. The average off-time between packets is 120 mSec. A continuously repeating transmission would transmit a maximum of 68 times in a 10 second period or a maximum of three times on any one channel for a maximum occupancy of 3 x 28 mSec or 84 mSec. This is under the limit of 400 mSec in a 10 Sec window. In actual operation, transmissions are much less frequent.

15.247 (b)(2): Conducted Power Measurement: The output power of the transmitter was measured using a direct temporary connection from the antenna port to our laboratory spectrum analyzer. The test samples were modified to allow for continuous re-transmission. The HP-8594E spectrum analyzer was set to 100 kHz IF bandwidth, 20 MHz span, and 20mSec scan rate. The peak power was measured at +10 dBm at both high and low frequencies.

15.247(c): Out Of Band Radiation Limits: These test scans were performed on the test unit specially modified to provide continuously repeating transmissions on three frequencies to allow measurements near the low, center, and high portions of the occupied band. These results are summarized on page A2 of the TUV test report.

15.247(h): Channel Coordination: As a one-way signaling device, each transmitter operates independently and asynchronously, so that the timing and channel position within the sequence are random with respect to any other transmitters operating in the system.