

## Washington Laboratories, Ltd.

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April 11, 2005

WLL Project: 8602

FCC ID: D04LIBUHX

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

RE: Comments of April 6, 2005

APPLICATION: D04LIBUHX Checkpoint Systems, Inc.

Dear Mr. Ward:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in *bold italic*. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,

Gregory M. Snyder
Chief EMC Engineer, Wireless/Telco Services Manager

Brian J. Dettling
Documentation Specialist

1) Please note that the alignment of the block designations and the blocks is off on pages 9, 18, 28 and 31 of the operational description (Confidential\_AR400US Operational Description.pdf). Please correct.

R. The Operational Description for the AR400 does not convert to pdf form correctly. The original "Word" document has been uploaded. See exhibit "AR400US Operational Description.doc".

2) Please note that the manual does not appear to have any of the required FCC statements (i.e. 15.21 and 15.105). Please provide a manual with all required FCC statements.

R. The User Manual has been amended to include regulatory information. Please see "LIBUHX User Manual revised.pdf".

- 3) Please note that the operational description mentions use at frequencies not approved for US operation. These frequencies are listed for EU operation. Please note that 15.5 states that a device under part 15 cannot be manufactured with user accessible controls of functions that allow the device to operate on non-US frequencies. Please verify that the US product as sold in the US cannot be made to operate on any non-US frequency.
- R. We assume you are referring to the AR400 component. The description covers all versions available from the manufacturer. The US product is sold to only function in the US allocated frequencies and can not be changed to operate on non-US frequencies. This device was originally approved by ATCB in June 2004 (PYFAR400US).
- 4) Please note that the FHSS device operational description mentions "CW differential drive level". Also, please note that the operational description mentions CW. Please verify that this is not an indication that the FHSS device transmits only a CW signal at some point. Please note that this would not be allowed as it would not meet the definition of a FHSS device (mainly a spread spectrum system in which the carrier is *modulated* with the coded information in a conventional manner causing a conventional spreading of the RF energy about the frequency carrier.)
- R. The FHSS device does not transmit CW. Only data (modulated signal) is transmitted at all times.
- 5) FYI the operational description should be for US only products and need not consider other countries.
- R. Noted.
- 6) Please note that the operational description states the output of the device is 1W yet the 731 and test report state the output is only 0.491W. Please be consistent in the documentation. Please correct the appropriate documents to reflect the actual power of the device as will be granted.
- R. The FHSS device has a selectable power from 31.6mW up to 1 Watt as approved under FCC ID: PYFAR400US. However, this application fixes the output power to 0.491W and cannot be adjusted. The device as used in this application is limited to the level indicated on the 731 form.
- 7) Please note that the 731 states the device is seeking certification under 15.225. Please note that the particular frequency allocation under 15.225 is between 13.11 and 14.01MHz. The frequency listed on the 731 is 7.6 to 8.7MHz range. Please provide a 731 that accurately reflects the device in question. Please also include the field strength level for this frequency range on the 731.
- R. This typographical error has been corrected, and the additional information provided. Please see "LIBUHX Application Form corrected.pdf".
- 8) Please note that MPE is only good for devices that are greater than 20cm from the person. Thus, calculating a 'safe' distance less than 20cm has no meaning. Please provide the level MPE at 20cm in the MPE report.
- R. The RF Exposure Evaluation has been done as a fixed installation. Please reference e-mail from Tim Harrington regarding this device. Also, this issue has been extensively discussed amongst Tim Johnson, Tim Harrington, Greg Sleet and myself. You may like to consult with Tim Johnson regarding this subject.
- 9) Page 8 of the schematics (Confidential\_LIBUHX Schematics.pdf) appear to mention filtering at

- 13.6MHz. The report states the device operates in the 8MHz range. Please explain.
- R. This indicates the cut-off point of the filter, not the transmitting frequency.
- 10) Please provide some additional information on the algorithm used to determine the pseudorandom hopping sequence to show that the hopping sequence is truly pseudo-random.
- R. We assume you are referring to the AR400 module. This device was approved by ATCB in June 2004 (FCC ID PYFAR400US) and no changes have occurred to the information originally submitted. The submitted information shows the pseudorandom hopping sequence.