



Washington Laboratories, Ltd.

7560 LINDBERGH DRIVE
GAITHERSBURG, MD 20879
(301) 417 - 0220 FAX # (301) 417 - 9069

January 9, 2003

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

RE: Comments of December 24, 2002
APPLICATION: O7X-SW-1 Pelican Accessories

Dear Mr. Johnson:

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

WLL Project: 7299

December 24, 2002
RE: Pelican Accessories.
FCC ID: 07X-SW-1

- 1) Regarding the Transmitter Schematics, please provide one of the following:
- a) A schematic of the RF portion.
 - b) Alternatively, if the radio is a modular component from a different manufacturer, you may instead provide a parts list that shows the RF Module as a part from a different manufacturer. If the parts list is provided, please be sure to let us know if confidentiality is requested on it and update the confidentiality letter if necessary.

R. The radio module is provided from a different manufacturer. The Parts List of the unit showing this module has been uploaded. Please see exhibit “SW-1 SW-2 Parts List (Confidential).pdf”. Confidentiality has been requested of the Parts List. A revised Request for Confidentiality has been uploaded. Please see exhibit “SW-1 Revised RFC Letter.pdf”.

2) If the TX module is built by the applicant, please provide a block diagram that shows the frequencies of all the oscillators in the TX portion of the device (CFR 2.1033(a)(5)).

R. The block diagram shows the module that is provided by a different manufacturer and listed in the parts list.

3) Since this device contains a RX and digital device, the users manual should also include the information specified by 15.105.

R. As required for the certification, the statement of 15.19(3) has been included in the User’s Manual to warn the user of interference. Previous devices of this nature have not required the additional statement of 15.105. As per our discussion the client has been notified to add this statement to future manuals.

4) Please confirm that digital device and RX portion of this product have been approved under a DoC authorization as shown on the labeling information.

R. The Rx and digital portions of the product have been tested and approved under the DoC process.

5) The 731 form & Test report show the frequency range as 906-927 MHz, but the theory of operation provided shows 903-926.536 MHz. Note that test report shows 906 as channel 1 which does not match the theory of operation. Please comment and correct the affected exhibits. Note that Table 5 in the test report also states 903 MHz, but the lowest frequency measured appears to be 906 MHz. FYI: The FCC expects the testing to be performed at lowest and highest channels available, unless this is extremely difficult for some reason.

R. The unit only has 4 available channels from 906M to 927MHz. The theory of operation was referring to the module which has the capability of 8 channels over 2 bands, however, this unit only uses 4 and the end user only be able to select among the 4 channels. The Theory of Operation has been changed to reflect the actual operating frequencies for this certification. Please see exhibit “ANT Technical Datasheet-Rev5.pdf”. The test report Table 5 was in error due to a previous test version of this unit. Table 5 has been corrected and a new Test Report has been uploaded. Please see exhibit “SW-1 Revised Test Report.pdf”.

6) The theory of operation shows 8 channels, while the test report states that only 4 channels are selectable. Please explain and correct the affected exhibits.

R. The Theory of Operation has been changed to reflect the actual operating frequencies for this certification.

7) The duty cycle plot provided does not show even spacing between all data packets. Is this a nature of the equipment or a factor of how the plot was taken? For this measurement it is best to use a single trace mode of the spectrum analyzer to ensure proper measurement.

R. This is the correct operation of the unit. The unit was fully functional and all buttons were pressed to verify worst case operation.

8) Because the device is a portable piece of equipment, emissions must be measured with the EUT positioned in each of 3 axis. It can not be determined if this was performed.

R. The unit was tested in three orthogonal planes with the worst case emissions reported. Page 13 of the test reports states that the 3 orthogonal planes were tested. Also some of the data in the notes column lists an X, Y or Z referring to the position. Column width limitations in the data above 1GHz did not allow the notes column to appear.

9) It appears that the data in Table 6 & 7 included a preamp in the calculations? Please confirm that a preamp was used. Note that the calculation information given in 4.3.1 doesn't mention a preamp.

R. Table 6 and 7 do include correction of a preamp that was used above 1GHz The preamp is listed at the top of the data sheet. Future data sheets have the preamp listed as a separate column within the data sheet. The sample calculation in Section 4.3.1 shows the gain correction.