



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

May 27, 2004

RE: Airspan Networks

FCC ID: PIDAIRSPAN-WIPLL9

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

- 1) The characters used for the FCC ID must be all capital letters. Please update labeling exhibit and other exhibits as necessary.
- 2) If standard N connectors are used as provided in this application, then the application must include a separate cover letter asking and justifying professional installation. The letter should address the following 3 items:
 - a) Marketing examples:
 - The device cannot be sold retail, to the general public or by mail order. It must be sold to dealers or have strict marketing control.
 - b) Requires professional installation; examples:
 - installation must be controlled.
 - installed by licensed professionals (EUT sold to dealer who hire installers)
 - installation requires special training (special programming, access to keypad, field strength measurements made) What is unique, sophisticated, complex, or specialized about your equipment which REQUIRES it to be installed by a professional installer?
 - c) Application example:
 - The intended use is generally not for the general public. It is generally for industry/commercial use.
- 3) It is confusing to determine which external antennas are being approved for this device due to different models, etc. The FCC expects a list of antennas as to what antennas are being approved (type, gain, etc.) to be with the application. Please clarify.
- 4) It appears from the information provided that the device may be used with directional panel antennas, and omni-directional antennas (2.5.2.1.1). Note the FCC expects the device to be tested with each TYPE of antenna as well, regardless of gains involved.
- 5) Note that there is a variety of ways to approve a hybrid system (attachment for hybrids from the FCC has been provided on previous occasions). Recently approved devices for Airspan included both a FHSS and hybrid mode. Please explain if this device employs different operational modes or if it is always in hybrid mode. Note that there is a concern regarding FHSS mode only as the bandwidth is greater than that normally allowed for 900 MHz FHSS systems. The remainder of this application and comments was reviewed assuming the device is always in hybrid mode and can not normally operate in mutually exclusive modes. Other recently approved Airspan at 900 MHz only operated in hybrid mode (device does not operate in FHSS or DTS mode independently).
- 6) It is not clear from plot A8 provided that the whole Ton time is shown. Please provide an updated plot.

--- Continued on Next Page ---

- 7) The test report mentions cable loss for use with the 15.5 dBi gain antenna. It is uncertain if this cable already is provided permanently attached to the antenna, or is the responsibility of the installer to provide the cable. If a minimum cable length is necessary to be added during the installation, this should be shown in the manual in a clear and non-confusing way. Please clarify.



Timothy R. Johnson
Examining Engineer

[mailto: tjohnson@AmericanTCB.com](mailto:tjohnson@AmericanTCB.com)

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.