



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 3720

June 7, 2007

Randall S. Battat
President and Chief Executive Officer
Airvana, Inc.
19 Alpa Road
Chelmsford, Massachusetts 01824

Re: **Airvana, Inc.**
Amendment No. 1 to Registration Statement on Form S-1
File no. 333-142210
As amended on May 30, 2007

Dear Mr. Battat:

We have reviewed the above referenced filing and have the following further comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Dividend Policy, page 22

1. We note your response to prior comment 9. Further revise this section to make clear why the board declared the special dividend prior to the IPO, and why it has decided against dividends in the future. Discuss why the board decided to pay the special dividend in lieu of reinvesting the cash in the expansion of the company's business (its current strategy).

Selected Consolidated Financial Data, page 26

2. We note your response to prior comment 10. We believe that the explanation included in your response would be helpful to an investor. Please revise Note 1 on page 28 and in the

Summary Consolidated Data section on page 6 to address the difference in net income included in included in the calculation of pro forma earnings per share.

Key Elements of Financial Performance, page 32

Product and Service Billings, page 33

3. We note your added disclosure in response to prior comment 15. Confirm that no disclosure is required by Item 10(e)(i)(D) of Regulation S-K.

Stock-based Compensation, page 40

4. We refer to your discussion of the additional valuations performed in April and May of 2007. In addition to providing the components of change in the valuation analysis, please revise to explain which of these factors contributed to the decrease in fair value of your common stock from the March 22, 2007 valuation and why.

Executive Compensation, page 74

Compensation Discussion and Analysis, page 74

5. We note your response to prior comment 26. Further revise your disclosure to identify the companies used in the compensation composite.
6. We note your added disclosures in response to prior comment 29. Please further revise to identify the objectives that were underachieved for each named executive officer.
7. We note the additional bonus payment of \$14,480 paid to Mr. Battat in 2006. Identify what accomplishments the board considered in determining his "outstanding contribution."

Financial Statements

Note 10. The 2000 Stock Incentive Plan, page F-21

8. We note that you refer to an independent third party valuation specialist. While you are not required to make reference to independent valuations, when you do, you should disclose the name of the expert and include the consent of the expert since the reference is made in a 1933 Act filing.

Note 15 Special Cash Dividend, page F-29

9. We note your response to prior comment 42 and the revised disclosures in Note 15. Please provide the fair value calculations for options granted August 21, 2006 to demonstrate how you determined that the fair value of the stock option grants was the same on a pre and post-modification basis.

Randall S. Battat
Airvana, Inc.
June 7, 2007
Page 3 of 3

As appropriate, please amend your registration statements in response to these comments. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our comments.

You may contact Christy Adams, Staff Accountant, at (202) 551-3363 or Terry French, Accountant Branch Chief, at (202) 551-3828 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel
Assistant Director

cc: Peter N. Handrinos, Esq.
Via facsimile (617) 526-5000