

Mail Stop 3561

July 18, 2007

Via U.S. Mail

Steven Santo
Chief Executive Officer
Avantair, Inc.
4311 General Howard Drive
Clearwater, FL 33762

**Re: Avantair, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed July 6, 2007
File No. 333-142312**

Dear Mr. Santo,

We have reviewed your responses to the comments in our letter dated May 18, 2007 and have the following additional comments. Please note that all page references below correspond to the marked version of your filing provided by counsel.

General

1. We reissue our prior comment 1, in part. Please provide the disclosure required by Item 701 of Regulation S-K.
2. We note that you have obtained the consent of AvData. Please file the consent as a material exhibit. See Rule 436 of Regulation C.

Summary and Selected Consolidated Financial Data, pages 4 and 16

3. We note from your response to our prior comment 9 that the factors that materially impact the comparability of the information provided in the section entitled "Summary Consolidated Financial Data" are set forth in MD&A and you have included a cross reference to MD&A in your header on page 4. However, we believe that the cross reference to MD&A is too general and does not direct the reader to specific events that may have affected the comparability of the information in the Summary Consolidated Financial Data section. As previously requested, please revise to either disclose or cross-reference to a specific discussion

thereof, any factors that materially affect the comparability of the information provided in your Selected Financial Data. Such items may include, but not be limited to, business acquisitions or dispositions, accounting changes or other significant or unusual items which may be helpful to an investor's understanding of the selected financial data. Refer to the requirements of Item 301 of Regulation S-K.

Risk Factors

Material weaknesses in internal controls over financial reporting..., page 7

4. We note from your response to our prior comment 14 that you have listed the material weaknesses that were identified in the audit of the fiscal years June 2004, 2005 and 2006 and the actions you have taken to remediate these weaknesses. However, we do not believe that your response adequately addresses our previous comment. As previously requested, please revise your disclosure in the Risk Factors section and MD&A to indicate the nature of each of these material weaknesses and explain how you plan to remediate the weaknesses and become compliant with Section 404 of the Sarbanes-Oxley Act. As part of your revised disclosure, please clearly indicate the timing of each of the remediation activities. Also, in light of the material weaknesses, please tell us how you have determined that the audited financial statements for the year ended June 30, 2006 and the unaudited financial statements for the interim period ending March 31, 2007 have been appropriately presented.

Management's Discussion and Analysis

General

5. Please update the discussion, where appropriate. For instance, we note the disclosure that "Avantair expects to have approximately 40 aircraft in its fleet by June 30, 2007."

Aircraft Maintenance, page 35

6. We note your response to prior comment 20. We reissue the comment. Please disclose in the prospectus an estimate of the number of aircraft that may be due for D check/inspection in the next 12 months. Please also discuss whether there will be any significant financial impact as a result of the aircrafts being out of service for 21 days and the costs of the inspection.

Further, please disclose the material terms of the service contract with Jet Support Services, Inc. and file the agreement as an exhibit. The agreement appears to be material.

Information Technology, page 36

7. We note that you have two agreements with application services providers, Salesforce and Corridor. Please discuss the terms of the agreements, including the terms of the agreement and any licensing fees, if material. Further, please file the agreements as exhibits.

Summary Compensation Table, page 47

8. Please clarify the time period for the fiscal year 2006. It appears from your discussion of pension benefits and nonqualified deferred compensation on page 48 that the period is from 1/1/06 to 12/31/06. If that is the case, we reissue prior comment 22. Please revise the summary compensation table to comply with Item 402(c) of Regulation S-K. Please also add the information and the tables required by Item 402, as appropriate. In this regard, we bring your attention to the 150,000 options granted in 2006, 200,000 shares of warrants granted in the employment agreements with your CEO and CFO entered on 9/29/06, and the 474,000 fully vested shares of Class A common stock. Please also see comment 14 of this letter.

Moreover, please also revise the Exchange Act reports accordingly. See Release No. 33-8732A (August 29, 2006).

Certain Relationships and Related Party Transactions, page 54

9. We reissue prior comment 25. Please disclose the information required by Item 404(a) of Regulation S-K since the beginning of your last fiscal year. Please revise the discussion to include the name of the related person(s), each related person's interest and the approximate dollar value of the amount of the related person's interest in the transactions. In addition, it does not appear that all related transactions since the beginning of the last fiscal year are disclosed. For examples, we bring your attention to certain related transactions in Note 5 on page F-11, Note 8 on page F-25, and Note 11 on page F-28, as well as the grant of 214,000 shares of restricted stock and the 30,000 options.

We also note that you have entered into a tolling agreement with CNM, please explain why you believe Item 404 information need not be disclosed for the debt agreement and/or the tolling agreement with CNM.

Interim Financial Statements for the Nine Months Ended March 31, 2007

Condensed Consolidated Statements of Stockholders' Deficit, page F-5

10. We note from your statements of stockholders' deficit that in the nine months ended March 31, 2007 you issued stock options to non-employee directors and

recorded paid in capital and compensation expense of \$10,807. Please revise your notes to the interim financial statements to disclose the nature of this transaction and how you determined the amount of compensation expense to be recorded. If this amount relates to the 150,000 stock options issued in the three months ended March 31, 2007, as disclosed in Note 5, please tell us and revise your notes to the financial statements to clearly explain this transaction.

11. Please revise the notes to the company's interim financial statements to disclose the nature and terms of all of the equity transactions that have been reflected in the company's consolidated statement of stockholders' deficit for the nine months ended March 31, 2007. Please ensure that your revised disclosure is presented in a level of detail consistent with that provided in Note 11 to your audited financial statements.

Condensed Consolidated Statements of Cash Flows, page F-6

12. We note from your statements of cash flows that in the nine months ended March 31, 2007 you had a significant amount of borrowings under long-term notes payable and line of credit. Please revise the notes to your interim financial statements to disclose the nature and terms of this additional debt. Also, please disclose the nature and terms of the conversions of short-term borrowings to long-term notes payable.

Notes to the Financial Statements

General

13. We note that several disclosures which were included in the notes to the interim financial statements as of December 31, 2006 as included in your initial Form S-1, are not included in the notes to the financial statements as of March 31, 2007 as included in Amendment #1 to Form S-1. Please revise to ensure that all significant transactions and disclosures that relate to the nine months ended March 31, 2007 are included in the notes to the interim financial statements as of March 31, 2007. For example, many of the related party transactions which were disclosed in the initial Form S-1 have not been disclosed in Amendment #1. Also, Note 7 Bridge Loans and Sales of Stock is not included in Amendment #1.
14. We note from your response to our prior comment 26 that the sale of common stock to unrelated parties was determined by arm's length negotiations and management acquired shares for the same consideration which resulted in no compensation expense. In light of your disclosure on page 14 that indicates the trading price of common stock during the second quarter of 2006 ranged from \$5.30 to \$5.45 per share, please tell us why you sold shares of common stock at below market price and why you believe that \$2.78 per share represents the fair

value of the common stock at the date of issuance. Also, if the shares sold to management were below the market value of the common stock at the date of issuance, we believe that compensation expense should be recorded for the difference between the market value of the common stock and the share price of \$2.78 per share. Please advise or revise accordingly.

15. We note from your disclosure in MD&A on page 26 that the balance outstanding under the debt facility with CNM, Inc. was paid down to \$10 million during the quarter ended March 31, 2007 and this balance has been converted to a promissory note payable over 36 months with interest at 10% per year. Please revise the notes to your interim financial statements to disclose this transaction and the initial terms of the debt facility with CNM, Inc., and to explain how you accounted for the conversion of the debt to a note payable.
16. We note from your disclosures on page 47 and 49, that subsequent to March 31, 2007, you granted 214,000 shares of restricted stock to your executive officers and employees and you granted 30,000 options to purchase shares of common stock to certain officers and employees. Please revise the notes to your interim financial statements to disclose these transactions as subsequent events, including how you accounted for the shares and options issued and any related expense recognized.

Note 1. Operations and Accounting Policies

Operations, page F-7

17. We note your disclosure that on October 2, 2006 you signed a definitive stock purchase agreement with Avantair Inc. which provided for Avantair to issue 6,684,822 shares of common stock to the stockholders of Old Avantair in exchange for all of the issued and outstanding shares of Old Avantair. Please revise the notes to the interim financial statements to disclose in detail the date this transaction was finalized, the terms of the acquisition, and how you accounted for the reverse acquisition transaction in your financial statements.
18. We note the disclosure provided in Note 1 in response to our prior comment number 31 and your response to our prior comment 31, in which you explained your planned accounting treatment for the shares to be issued to the stockholders of Old Advantair in the event that certain EBITDA targets and trading prices are achieved. However, we continue to believe that your planned accounting treatment for the potential issuances of these shares is not appropriate. Since the acquisition of Avantair was appropriately accounted for by the company as a recapitalization transaction, and is not a business combination that would be accounted for pursuant to SFAS No.141, we believe that any shares issued as a result of achieving the earnings targets or market conditions outlined in the agreement should be

accounted for as an expense at fair value in the company's financial statements when issued pursuant to SFAS No.123R.

If you do not concur with our conclusions, please provide us with the following additional information:

- Supplementally provide us with Exhibits 1 through 6 to the purchase agreement dated October 2, 2006 and any subsequent amendments to these exhibits. Also, please file these exhibits via EDGAR pursuant to Regulation S-T.
- Explain how the various parties to the agreement were affiliated to Old Avantair and "New Avantair" both before and after the acquisition transaction. Specifically address any employee/management/director or similar roles of these parties both before and after the transaction.
- Explain the business purpose for including the provisions for additional consideration upon attainment of earnings/market conditions in the stock purchase agreement.
- Explain why you believe your planned accounting treatment is appropriate including the relevant GAAP accounting literature that supports your planned treatment.

We may have further comment upon receipt of your response.

Loss Per Share, page F-9

19. We note from your disclosure that the total number of potentially dilutive securities excluded from the calculation of diluted loss per share for the nine months ended March 31, 2007 was 12,646,744. Please revise your notes to the interim financial statements to include: the amount of warrants outstanding; the title and aggregate amount of securities called for by warrants outstanding; the period during which warrants are exercisable; and the exercise price of the warrants outstanding for each period presented. Additionally, please revise to include a table which details the activity of the warrants (exercised, expired, issued) during the nine month period for which an income statement is presented. Also, please ensure that the notes to your financial statements explain how all warrants granted during the periods presented were valued and accounted for in your financial statements.

Note 6. Capital Stock

20. We note the disclosure in Note 6 indicating that subsequent to the closing of the acquisition on February 22, 2007, the company issued 200,545 shares having a fair value of \$1,070,910 to Early Bird Capital as a consulting fee. Please explain how you determined the fair value of the shares issued for consulting services and explain how you accounted for the issuance of these shares in Note 6. Please note that because the acquisition of Avantair by Ardent was appropriately accounted for

as a recapitalization, and is not a business combination to be accounted for pursuant to SFAS No.141, we believe that any shares issued in consideration for services performed in connection with the transaction should be reflected as an expense in the company's financial statements.

Audited Financial Statements for the year ended June 30, 2006

Balance Sheet, page F-14

21. We note from your response to our prior comment 35 that you do not believe deferred revenue and deferred costs should be allocated to current liabilities. However, we continue to believe that any amounts of deferred revenue that will be recognizable within one year should be classified as a current liability. Please note that paragraph 7 of Chapter 3A of ARB 43 states that current liabilities include "collections received in advance of the delivery of goods or performance of services." Please revise your balance sheets accordingly.

Note 2. Acquisition

22. We note from your response to our prior comment 40 that the purchase price was determined by valuing the assets acquired and liabilities assumed. However, we do not think your response and revised disclosure adequately address how the shares issued in the transaction were valued. Please revise Note 2 to disclose the value assigned to the shares issued and the basis for determining the valuation of the Class A and Class B common shares (i.e., explain how you determine the number of shares to issue for the value of the net assets received). Also, please revise your notes to the financial statements to disclose the primary reasons for the acquisition, including a description of the factors that contributed to a purchase price that resulted in the recognition of goodwill. Refer to the guidance outlined in paragraph 51b of SFAS No.141.

Note 3. Summary of Significant Accounting Policies

Goodwill, page F-22

23. We note from your response to our prior comment 39 that your goodwill impairment test compared the fair value of the reporting unit with its carrying amount, including goodwill, and you prepared cash flow projections which support the carrying value of the other non-current assets. However, we do not believe that your response adequately addresses our prior comment. As previously requested, please tell us, and revise the notes to the financial statements and MD&A to explain in detail, the method and significant assumptions used by the company in its impairment analysis of its goodwill and other long-lived assets for the most recent period presented. These assumptions should include those used in determining the

fair value of the reporting unit and the cash flow projections used in the impairment analysis and should be described in detail. Your response and your revised disclosure should also explain your basis for any projected improvements in future operating results that were provided for in your impairment analysis. We may have further comment upon receipt of your response.

Other

24. The financial statements should be updated, as necessary, to comply with Rule 3-12 of Regulation S-X at the effective date of the registration statement.
25. Provide a currently dated consent from the independent public accountant in the amendment.

* * * * *

As appropriate, please amend the registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Steven Santo
Avantair, Inc.
July 18, 2007
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You may contact Claire Erlanger at (202) 551-3301 or Linda Cvrkel at (202) 551-3813 if you have questions regarding comments on the financial statements and related matters. Please contact H. Yuna Peng at (202) 551-3391 or me at (202) 551-3750 with any other questions.

Regards,

Max A. Webb
Assistant Director

cc: William Haddad, Esq.
DLA Piper US LLP
via facsimile: (212) 884-8498