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March 27, 2009

VIA FACSIMILE AND OVERNIGHT COURIER

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549-3561

Attn: Linda Cvrkel, Branch Chief
Mail Stop 3561

Re: AeroVironment, Inc.
Form 10-K for the fiscal year ended April 30, 2008
Filed June 26, 2008
File No. 001-33261

AeroVironment, Inc. (the "Company") hereby responds to the comment letter dated March 13, 2009, related to the above-referenced filing, as follows. Each SEC staff comment is repeated for reference, followed by the Company's response.

Form 10-K for the fiscal year ended April 30, 2008

Consolidated Statement of Income, page 54

1. We note from your consolidated statement of income that interest income of \$3,796 for 2008 significantly increased in comparison to interest income of \$1,707 for 2007. When individual line items, disclosed in your statement of income, fluctuate in comparison to the comparable prior period, please revise your MD&A in future filings to quantify and disclose the nature of each item that caused the significant change. See Item 303 of Regulation S-K and FR-72 for guidance.

RESPONSE:

In future filings, when individual line items fluctuate in comparison to the comparable prior period, we will quantify and disclose the nature of each item that caused the significant change in our MD&A.

Consolidated Statements of Cash Flows, page 56

2. Reference is made to the tax benefit from exercise of stock options in the amounts of approximately \$10,813,000 and \$629,000 for 2008 and 2007, respectively reported under operating activities. It appears that the amounts reported as tax benefit from exercise of stock options for periods subsequent to May 1, 2006, when you adopted SFAS No. 123(R), should be presented as cash flows from financing activities, as required by paragraphs 19(e), rather than as currently presented in your statement of cash flow. In this regard, please explain to us your rationale for presenting the amounts reported as tax benefit from exercise of stock options for 2008 and 2007 as cash inflows from operations, rather than presenting it as cash flows from financing activities, as prescribed by paragraph 19(e) of SFAS No. 95. We may have further comment after receipt of your response. Please also address this comment with regards to your interim financial statements included in subsequently filed quarterly reports on Form 10-Q, where applicable.

RESPONSE:

On May 1, 2006, the Company adopted the provisions of SFAS No. 123(R) using the prospective-transition method as required by paragraph 83. Paragraph 83 states that "Nonpublic entities, including those that become public entities after June 15, 2005, that used the minimum value method of measuring equity share options and similar instruments for either recognition or pro forma disclosure purposes under Statement 123 shall apply this Statement prospectively to new awards and to awards modified, repurchased, or cancelled after the required effective date. Those entities shall continue to account for any portion of awards outstanding at the date of initial application using the accounting principles originally applied to those awards (either the minimum value method under Statement 123 or the provisions of Opinion 25 and its related interpretive guidance)."

As we are required to continue to account for outstanding awards at the date of initial application using the accounting principles originally applied to those awards, we continue to use EITF Issue No. 00-15, paragraph 3, which requires that amounts reported as tax benefit from exercise of stock options should be presented as cash flows from operating activities.

Based on the guidance we have referenced, we respectfully submit that our presentation is appropriate for the years ended April 30, 2007 and 2008 and in subsequent quarterly filings.

Note 2. Short-term Investments, page 65

3. We note from the disclosure in the risk factors discussion on page 28 that the \$13.4 million of short-term investments held as of April 30, 2008, consisted entirely of auction rate municipal bonds with maturities that range from approximately 11 months to 27 years. Given the contractual maturities of these investments, and the fact that these short-term investments may not be readily liquid due to the Company's recent experience of failed auctions with respect to certain of these securities during the fourth quarter of fiscal 2008, please revise the notes to your financial statements in future filings to include the disclosures outlined in paragraph 20 of SFAS No. 115, as applicable.

RESPONSE:

In future filings, we will include the disclosures outlined in paragraph 20 of SFAS No. 115, as applicable, in the notes to our financial statements.

Form 10-Q for the quarterly period ended November 1, 2008

Note 2. Accounts Receivable, page 8

4. We note from your disclosure that you have a trade receivable from an automotive manufacturing company of approximately \$2,900,000, which may not have the minimum required liquidity to operate its business through its first two quarters of 2009. We also note that as of November 1, 2008 the Company had not reserved any portion of this receivable pursuant to the guidance of SFAS No. 5. In this regard, please provide us with all of your facts and circumstances considered in concluding that a reserve was not necessary as of November 1, 2008. Additionally, please provide us with the aging of this trade receivable and explain why none of the components of this trade receivable met the reserve criteria prescribed by your accounting policy used in determining your allowance for doubtful accounts as of November 1, 2008. Furthermore, please tell us whether or not a reserve has been subsequently established. If a reserve has been subsequently established, please provide us with the amount, and the reason why the facts and circumstances, which existed subsequent to November 1, 2008 were not present as of November 1, 2008. We may have further comment after receipt of your response.

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RESPONSE:

In SEC filings made on November 7, 2008 and November 10, 2008, our automotive manufacturing customer indicated that it may not have the minimum required liquidity to operate its business through its first two quarters of 2009. However, as of November 1, 2008, we did not reserve any portion of the receivable of approximately \$2,900,000 due to the following:

- The sale occurred on October 30, 2008, with payment terms of net 60 days. As of November 1, 2008 and the filing date of our Form 10-Q on December 4, 2008, the account was still current. The payment due date was within a timeframe that increased the probability that the customer would still have the necessary liquidity to pay our receivable.
- In all discussions with the customer through the filing date of our Form 10-Q on December 4, 2008, the customer indicated that they would pay the receivable in accordance with the agreed upon terms (net 60).
- As discussed in the SEC filings made by our customer on November 7, 2008 and November 10, 2008, the customer was involved in discussions with various United States federal government agencies and Congressional leaders regarding funding.
- After November 7, 2008 and through the date of our filing of our Form 10-Q on December 4, 2008, based on media coverage and discussions with the customer, management's judgment was that there was a high likelihood of our customer paying our receivable, such that we did not evaluate the likelihood of a loss on this receivable to be probable.
- Based on the information outlined above, we did not believe it was necessary to record a reserve as of November 1, 2008, related to the receivable of \$2,900,000. Given the timing of the fact pattern, we believe it would have been premature to record a reserve against this receivable as of November 1, 2008.
- Our accounting policy calls for a reserve to be recorded based on historical customer experience and current available information. As of November 1, 2008, we had not had any significant collectability issues with this customer and no prior receivables had required a reserve or had been written off. In addition, based on the information available through the date of our filing of our Form 10-Q on December 4, 2008, we did not believe there was sufficient information to record a reserve, pursuant to the guidelines of SFAS No. 5 paragraphs 8 (a) and (b), as of November 1, 2008.

As of the date of this letter, approximately \$290,000 of the \$2,900,000 receivable remains uncollected. During the net 60 payment period, a warranty repair action was required. Thus, the customer withheld 10% of the receivable, in accordance with the contract terms, until a satisfactory resolution was implemented. We have since remedied this situation and based on discussions with the customer, we are expecting to receive the remaining \$290,000 within 30 days from the date of this letter. Based on this information and our historical experience with this customer, we have not reserved any portion of this receivable as of the date of this letter.

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Definitive Proxy Statement on Schedule 14A

Executive Performance Bonus Program, page 17

5. We note that your Compensation Committee selected financial and strategic goals for each executive officer to make bonus adjustments relating to the Executive Performance Bonus Plan. In future filings, please provide quantitative disclosure regarding the targets actually reached based on the specific financial and strategic goals for each executive officer. To the extent you believe that disclosure of the targets is not required because it would result in competitive harm such that the targets could be excluded under Instruction 5 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation for such conclusion. Please also note that to the extent that you have an appropriate basis for omitting the specific targets, you must discuss

how difficult it would be for the named executive officers or how likely it will be for you to achieve the undisclosed target levels or other factors. General statements regarding the level of difficulty, or ease, associated with achieving performance goals either corporately or individually are not sufficient.

RESPONSE:

In future filings, unless disclosure of the targets actually reached based on the specific financial and strategic goals for each named executive officer relating to the Executive Performance Bonus Plan would result in competitive harm such that the Company may omit this information under Instruction 4 to Item 402(b) of Regulation S-K, we will provide quantitative disclosure regarding the targets actually reached based on the specific, quantitative financial and strategic goals for each named executive officer to the extent such information is material and would provide meaningful disclosure to the Company's stockholders and would further the goal of providing a clear and concise description of the determination of achievement of such objectives and the bonus determination for the Company's named executive officers.

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The Company hereby acknowledges the following:

- the Company is responsible for the adequacy and accuracy of the disclosure in its filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions regarding this response letter, please contact the undersigned at (626) 357-9983 x249 or, in my absence, Leslie Ravestein, Vice President and Corporate Counsel of the Company, at (626) 357-9983 x544.

Sincerely,

/s/ Stephen C. Wright

Stephen C. Wright
Senior Vice President and Chief Financial Officer

cc:
Steven Cohn, E&Y LLP

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