

Mail Stop 3561

March 13, 2009

Via U.S. Mail and Facsimile

Timothy E. Conver
Chief Executive Officer and President
AeroVironment, Inc.
181 W. Hungtington Drive, Suite 202
Monrovia, CA 91016

RE: AeroVironment, Inc.
Form 10-K for the fiscal year ended April 30, 2008

File No. 001-33261

Dear Mr. Conver:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments and comply with the remaining comments in all future filings. If you disagree, we will consider your explanation as to why our comments are 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 information so we may better understand your disclosure. After reviewing this information, we may 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.

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, significantly 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.

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 inflows 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.

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.

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 circumstance, 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.

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 4 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.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover

letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Jeffrey Jaramillo at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. Please contact Michelle Lacko at (202) 551-3240 or me at (202) 551-3813 with any other questions.

Sincerely,

Linda Cvrkel
Branch Chief

Via facsimile: Stephen C. Wright, Chief Financial Officer
(626) 359-9628

