

Mail Stop 3561

December 14, 2006

Via U.S. Mail & Facsimile (858) 523-5450
Mr. Timothy Conver
President and Chief Executive Officer
AeroVironment, Inc.
181 W. Huntington Drive, Suite 202
Monrovia, CA 91016

**Re: AeroVironment, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed November 29, 2006
File No. 333-137658**

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. 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 information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Our management, whose interests may not be aligned with yours, page 22

1. We note that you have revised your risk factor in response to our prior comment 1. However, our prior comment 2 from the letter dated November 21, 2006 requested the disclosure in the financial statements be amended to reflect that both prior and subsequent to the offering transaction, your executive officers will have the ability to control the vote on all matters requiring stockholder approval. Please revise the related party footnote in your annual and interim financial statements accordingly.

October 28, 2006 Interim Financial Statements, page F-30

2. Please clarify for us if the six months ended October 29, 2005 has been restated to properly account for the repurchases of stock in accordance with our prior comment 4. Confirm that the interim amounts presented also reflect the proper accounting as applied in the restatement and appropriately label all such interim information in your financial statements and MD&A as restated. If no restatement of this period was required, please explain why.

As appropriate, please amend your 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 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 filing to be certain that the filing includes all information required under the Securities Act of 1933 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.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

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.

Mr. Timothy Conver
AeroVironment, Inc.
December 14, 2006
Page 3

You may contact Heather Tress at (202) 551-3624 or Linda Cvrkel at (202) 551-3813 if you have questions regarding comments on the financial statements and related matters. Please contact Joshua Ravitz at (202) 551-4817 or me at (202) 551-3755 with any other questions.

Sincerely,

Max A. Webb
Assistant Director

cc: Via Facsimile (858) 523-5450
Craig Garner, Esq.
Michael Sullivan, Esq.
Latham & Watkins, LLP