



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3561

November 2, 2010

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

**Re: AeroVironment, Inc.
Form 10-K
Filed June 25, 2010
File No. 001-33261**

Dear Mr. Conver:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Schedule 14A filed August 20, 2010

Executive Compensation Discussion and Analysis, page 18

1. We note on page 26 that you awarded bonuses pursuant to your Management Bonus Plan to Messrs. Herring and Kim. While you state that employees that are not named executive officers are eligible for these awards based on "achievement of financial goals," the criteria upon which awards were based for Messrs. Herring and Kim are unclear. Please confirm that in future filings you will disclose the criteria upon which Management Bonus Plan awards are granted to named executive officers. If these criteria are based on the achievement of financial goals, please confirm that in future filings you will disclose the specific performance targets used to determine cash bonus amounts pursuant to the

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Management Bonus Plan. Alternatively, provide a supplemental analysis as to why it is appropriate to omit these targets. To the extent that it is appropriate to omit specific targets, please provide the disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. General statements regarding the level of difficulty, or ease, associated with achieving performance goals are not sufficient. In discussing how likely it will be for the company to achieve the target levels or other factors, provide as much detail as necessary without providing information that poses a reasonable risk of competitive harm.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

Please contact John Dana Brown at (202) 551-3859 or the undersigned at (202) 551-3750 if you have any questions regarding these comments.

Sincerely,

Max A. Webb
Assistant Director

cc: Jikun Kim
Fax: (626) 359-9628