



DIVISION OF
CORPORATION FINANCE

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

January 11, 2012

Via Email

Jikun Kim
Chief Financial Officer
AeroVironment, Inc.
181 W. Huntington Drive, Suite 202
Monrovia, CA 91016

**Re: AeroVironment, Inc.
Form 10-K for the fiscal year ended April 30, 2011
Filed June 22, 2011
File No. 001-33261**

Dear Mr. Kim:

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 10 business days by confirming that you will revise your document in future filings (unless otherwise indicated) and providing any requested information. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Annual Report on Form 10-K

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 52

Revenue Recognition, page 54

1. We note from in your Critical Accounting Policies discussion on page 54 that revenue and profits on fixed-price contracts are recognized using the percentage-of-completion method of accounting. We also note that you review cost performance and estimates to complete at least quarterly and in many cases more frequently and that the impact of revisions in profit estimates for all types of contracts are recognized on a cumulative catch-up basis in the period in which the revisions are made. We further note from the discussion on page 34 of your Annual Report on Form 10-K that fixed-price contracts represented approximately 69% of your revenue for the fiscal year ended April 30, 2011.

Given that a significant portion of your revenues are recognized using the percentage of completion method, a significant change in one or more of these estimates could affect the profitability of your business at both the segment level and on a consolidated basis. Pursuant to ASC 250-10-50-4, please revise the notes to your financial statements to quantify the impact of changes in estimates on your results of operations for each period presented and provide an analysis of the underlying reasons for the changes in estimates. With regard to segment level disclosure, you should revise to provide this disclosure when such changes materially impact a segment's measure of profit. As part of your response, please provide us with a copy of your intended revised disclosure.

Results of Operations, page 57
Costs of Sales, pages 58 and 59

2. We note that your discussion of costs of sales and changes in costs of sales provided in MD&A for all periods presented in your financial statements is relatively limited in spite of the fact that such costs comprise a significant portion of the Company's total operating expenses. In light of the overall significance of such costs and their resultant impact on the Company's profitability levels on both a consolidated basis as well as at the segment level, please significantly expand your discussion of cost of sales to address the following:
 - the facts and circumstances responsible for changes in the levels of both costs of sales associated with product sales and contract services during all periods presented and
 - the facts and circumstances responsible for changes in the level of costs of sales associated with both your UAS segment and your EES segment.

Your revised discussion should quantify and discuss the impact of each significant component of costs comprising cost of sales that caused cost of sales to materially vary from period to period. This disclosure should be presented in a manner so as to allow investors to discern the relative contribution of each of multiple components cited to the total change in cost of sales and resultant gross profits. In addition, the impacts of material variances in components of cost of sales that offset each other should be separately disclosed, quantified, and discussed (and not netted). As part of your response, please provide us with your intended disclosures.

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.

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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.

You may contact Jean Yu at (202)551-3305 or myself at (202)-551-3813 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Linda Cvrkel

Linda Cvrkel
Branch Chief