



DIVISION OF
CORPORATION FINANCE

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

March 14, 2014

Via E-mail

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

**Re: Aerovironment, Inc.
Form 10-K for the fiscal year ended April 30, 2013
Filed June 26, 2013
Form 10-Q for the fiscal quarter ended October 26, 2013
Filed November 27, 2013
File No. 001-33261**

Dear Mr. Kim:

We have reviewed your filings 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 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, please tell us why in your response.

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

Form 10-K for the fiscal year ended April 30, 2013

Management's Discussion and Analysis

Critical Accounting Policies and Estimates, page 53

Revenue Recognition, page 53

1. We note your disclosure that during the fiscal years ended April 30, 2013, 2012 and 2011, changes in accounting estimates on fixed-price contracts recognized using the percentage of completion method of accounting were not material to your consolidated

financial statements or your two reporting segments' measure of profit. In light of the fact that there may be significant favorable and significant unfavorable adjustments that net to a lesser amount, we believe that your disclosure in MD&A should be revised to provide the gross amount of favorable and unfavorable adjustments to contract estimates to complete for each period presented. Also, your analysis of the underlying reasons for the changes in estimates should be related to each of the significant gross favorable and unfavorable adjustments. Please revise accordingly.

Financial Statements, page 62

Notes to the Consolidated Financial Statements, page 69

3. Fair Value Measurements, page 80

2. We note from the income statement that you recognized \$6.2 million of income from the change in fair value related to the embedded conversion option of the convertible bonds purchased in 2013 and disclosed in Note 2. We also note from your disclosure in Note 15, that these bonds experienced a decline in fair value subsequent to April 30, 2013. Please tell us, and revise to disclose further details on your valuation methodology for the derivative associated with the convertible bonds. Your disclosure on page 80 indicates that you use a binomial model; however, the inputs were not disclosed in detail. Given the significance of the \$6.2 million gain on the conversion option with regard to your fiscal 2013 net income, please provide us with the detailed assumptions used in your valuation of the conversion option at April 30, 2013. Your response and revised disclosure should discuss your original cost of the bonds, valuation of the conversion option at the date you acquired the bonds and the factors that contributed to the significant gain of \$6.2 million recognized during your fiscal year ended April 30, 2013. Please also explain to us why the bonds experienced a decline in fair value subsequent to April 30, 2013.

14. Quarterly Results of Operations (Unaudited), page 90

3. We note fluctuations in your quarterly revenues, gross margin, and net income. Please discuss the nature of any unusual or infrequent items that impacted your quarterly results of operations for the various periods presented. Refer to the requirement outlined in Item 302(a)(3) of Regulation S-K.

Form 10-Q for the fiscal quarter ended October 26, 2013

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 15

Results of Operations, page 15

Six Months Ended October 26, 2013 Compared to Six Months Ended October 27, 2012, page 17

4. We note changes in your cost of sales related to your “organizational realignment.” Please tell us, and revise the notes to your financial statements to disclose the nature of such activities and include the disclosures required by ASC 420-10-50 as necessary.
5. We note that in the six months ended October 26, 2013, cost of sales significantly increased as a percentage of revenue and gross margins decreased as a percentage of revenue, when compared to the six month period ended October 27, 2012. In light of this significant change in cost of sales and gross margin, we believe that you should revise your discussion in MD&A to expand and enhance your discussion of cost of sales with regards to both product and services sales. As part of your revised disclosure, please revise to quantify and discuss the impact of each significant component of costs comprising cost of sales that caused cost of sales to materially vary (or not vary when expected to). For costs that cannot be clearly separated and discussed, include a separate detailed discussion of non-business group factors affecting operating earnings, where they are analyzed from period to period with detailed explanations regarding their fluctuations. 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 operating earnings.
6. Additionally, please note that even when total amounts of costs of sales do not materially vary from period to period, the impacts of material variances in components of cost of sales that offset each other should be separately disclosed, quantified, and discussed (not netted). Please also ensure that your revised disclosure provides appropriate explanation of underlying reasons for changes (for example, in addition to quantifying the impacts of changes in price and volume, explain the underlying reasons for these changes). Given the potential for differing or offsetting results in your various segments, we encourage you to also provide the above disclosures at the segment level. As part of your response, please provide us with a copy of your intended revised disclosures.

Form 8-K filed October 4, 2013

7. We note that your reconciliation of EBITDA as included in Appendix A of exhibit 99.1, reconciles EBITDA to income from operations. In this regard, please revise to reconcile EBITDA to net income, which we believe is the most comparable GAAP measure. Refer to Question 103.02 of the Compliance and Disclosure Interpretations of Non-GAAP Financial Measures issued July 8, 2011.

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

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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 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.

You may contact Heather Clark at 202-551-3624 or Claire Erlanger at 202-551-3301 if you have questions regarding comments on the financial statements and related matters. Please contact me at 202-551-3813 with any other questions.

Sincerely,

/s/ Linda Cvrkel

Linda Cvrkel
Branch Chief