



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

January 5, 2017

Via E-mail

Gerald M. Haines II
Executive Vice President, Chief Financial Officer, and Treasurer
Mercury Systems, Inc.
201 Riverneck Road
Chelmsford, Massachusetts 01824

**Re: Mercury Systems, Inc.
Form 10-K for the Fiscal Year Ended June 30, 2016
Filed August 16, 2016
File No. 000-23599**

Dear Mr. Haines:

We have limited our review of your filing to the financial statements and related disclosures 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended June 30, 2016

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

Non-GAAP Financial Measures, page 40

1. We note that you exclude restructuring and other charges from your non-GAAP measures. Please explain to us why these are not normal, recurring, cash operating expenses necessary to operate your business. Refer to Question 100.01 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016.
2. Refer to the table on page 41 and footnote (2). Also refer to similar disclosure on page 22 of your September 30, 2016 Form 10-Q. Please tell us how you determined the effect to your tax provision of the items added back in determining adjusted EBITDA. Refer to

Question 102.11 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016 when preparing your next filing and earnings release.

Item 8. Financial Statements

Note P – Operating Segment, page 74

3. We note your disclosure that during fiscal 2016, you completed a series of internal organizational structure changes that eliminated your previous operating segments, Mercury Commercial Electronics (“MCE”) and Mercury Defense Systems (“MDS”). So that we may further understand the changes made, please provide us with sufficient information describing the changes made which resulted in the elimination of your MCE and MDS operating segments and your determination that you have only one operating segment. Please address the following:
- Describe the role of the CODM and each of the individuals who report to the CODM.
 - Describe the information regularly provided to the CODM, how frequently it is prepared and how it changed during fiscal 2016.
 - Describe the specific changes to the allocation of resources and assessment of performance by the CODM.
 - Describe how your organizational changes impacted your reporting unit structure for goodwill testing purposes. In this regard, we note that you continue to allocate goodwill to your MCE and MDS reporting units.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Eric Atallah at (202) 551-3663 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions. You may also reach me at (202) 551-3671.

Sincerely,

/s/ Kate Tillan for

Martin James
Senior Assistant Chief Accountant
Office of Electronics and Machinery