

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

Mail Stop 3561

August 16, 2017

Paul R. Lundstrom Chief Financial Officer Aerojet Rocketdyne Holdings, Inc. 222 N. Sepulveda Blvd, Suite 500 El Segundo, California 90245

Re: Aerojet Rocketdyne Holdings, Inc.

Form 10-K for Fiscal Year Ended December 31, 2016

Filed March 1, 2017 File No. 001-01520

Dear Mr. Lundstrom:

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 Fiscal Year Ended December 31, 2016

Selected Financial Data, page 28

1. You present the non-GAAP measure "Adjusted EBITDAP" as a percentage of net sales here and elsewhere in the Form 10-K, in the Form 10-Q and in earnings releases furnished in Form 8-K. Please present with equal or greater prominence the comparable GAAP measure as a percentage of net sales whenever "Adjusted EBITDAP as a percentage of net sales" is presented" pursuant to Item 10(e)(1)(i)(A) of Regulation S-K.

Management's Discussion and Analysis Overview, page 29

2. Please present with equal or greater prominence the comparable GAAP measure to the non-GAAP measure "net debt" pursuant to the guidance cited above.

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Use of Non-GAAP Financial Measures, page 45

3. We note you reconcile your non-GAAP measure of "Adjusted EBITDAP" to Income (loss) from continuing operations before income taxes here, in the Form 10-Q and in earnings releases furnished on Form 8-K. Please revise to reconcile this measure to net income or income from continuing operations after income taxes. Refer to Footnote 26 to FR-65 (SEC Release 33-8176.)

Notes to Consolidated Financial Statements Note 4. Income Taxes, page 82

4. We note in the reconciliation of unrecognized tax benefits on page 84 that increases based on tax positions in prior years went from \$0.6 million at December 31, 2015 to \$25.8 million at December 31, 2016. Please explain to us the facts and circumstances associated with the increase.

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 Abe Friedman at 202-551-8298 or Doug Jones at 202-551-3309 if you have questions regarding comments on the financial statements and related matters. Please contact me at 202-551-3380 with any other questions.

Sincerely,

/s/ Lyn Shenk

Lyn Shenk Branch Chief Office of Transportation and Leisure