Mail Stop 3561

March 26, 2010

Gregory Rufus Executive VP and Chief Financial Officer TransDigm Group Incorporated 1301 East 9th Street, Suite 3710 Cleveland, Ohio 44114

Re: TransDigm Group Incorporated File No. 001-32833 Form 10-K: For the Fiscal Year Ended September 30, 2009

Dear Mr. Rufus:

We have reviewed the above referenced filings and have the following comments. Unless otherwise indicated, we believe you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why a revision is unnecessary. Please be as detailed as necessary in your explanation. We have also asked you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

The purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects and welcome any questions. Feel free to call us at the telephone numbers listed at the end of this letter.

Please file your response to our comment via EDGAR, under the label "corresp," within ten business days from the date of this letter.

Form 10-K: For the Year Ended September 30, 2009 Item 7. Management's Discussion and Analysis of Financial Condition Overview, page 27

1. We note from selected financial data on page 22 that your net profit margin has increased from approximately 9 percent in 2005 to approximately 21 percent in 2009. It is not clear from the disclosure in your filing why your margins have increased or whether recent margins are sustainable and should be expected by investors in the future. Please supplementally tell us on an overview basis, and revise to disclose, why margins have changed over the long-term and whether you expect them to be maintained at current levels in the future (on average).

Results of Operations, page 34

2. You state that the decrease in cost of sales as a percentage of sales was primarily due to the strength of the Company's proprietary products, productivity improvements from continued cost reduction efforts, and favorable product mix. We believe that your

TransDigm Group Incorporated March 26, 2010 Page 2 of 3

> discussion and analysis of cost of sales could be made more useful to investors by expanding to further explain factors to which variances are attributed, such as those referred to above. For example, please revise to explain what you mean by the strength of your proprietary products, how specifically this strength was a factor in decreasing cost of sales as a percentage of sales in the current period, and the amount by which this factor impacted cost of sales. We believe you should revise to provide this level of analysis for each material factor to which variances are attributed. In addition, we encourage you to consider providing investors with more insight into the significant cost components within cost of sales by quantifying and discussing those significant components. Please supplementally provide us with a copy of your intended revised disclosure.

Liquidity and Capital Resources, page 37

- 3. We note that your long-term debt has increased from approximately \$890 million at September 30, 2005 to approximately \$1.77 billion at January 2, 2010. Please revise to provide a discussion of your short- and long-term expectations or plans with regard to your debt levels, including whether you expect to maintain, increase, or decrease them, and how specifically you expect to meet your debt obligations as they come due. Please provide us with a copy of your intended revised disclosure.
- 4. On page 40 of your filing you state that you believe you have sufficient resources to finance operations through at least fiscal 2010. You attribute this belief, in part, to anticipated cost savings and operating improvements. To the extent you reasonably expect these factors to impact your future results, please revise to further describe your plans and the expected impact.

Item 8. Financial Statements and Supplementary Data

Note 7. Inventories, page F-13

5. In future filings, please revise to separately disclose work in progress and finished goods. For further guidance, refer to Rule 5.02.6(a) of Regulation S-X.

Form 8-K filed on February 10, 2010

6. We note that you restated your basic and diluted earnings per share computation in your 10-K to give effect to participating securities under the two-class method. However, we also note that you continue to present two non-GAAP adjusted earnings per share amounts in your earnings release, neither of which account for dividends paid on participating securities and one of which is calculated under the treasury stock method and does not give proper effect to participating securities. You state that you are presenting these measures to permit investors to compare your results to others who do not use the two-class method. This appears to imply that investors should disregard the

TransDigm Group Incorporated March 26, 2010 Page 3 of 3

> fact that one entity has participating securities while others do not. In this regard, it is unclear from your disclosure why investors should disregard your participating securities. We believe you should discontinue the presentation of these non-GAAP measures in future filings.

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We urge all persons who are responsible for the accuracy and adequacy of the disclosure in your filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 comment, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in its filings;
- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Aamira Chaudhry at 202-551-3389 with any questions. You may also call me at 202-551-3380.

Sincerely,

Lyn Shenk Branch Chief