

April 30, 2010

VIA EDGAR AND FEDERAL EXPRESS

Mr. Lyn Shenk
Branch Chief
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-0005

Re: TransDigm Group Incorporated
Commission file number: 01-32833
Form 10-K: For the fiscal year ended September 30, 2009

Dear Mr. Shenk:

Set forth below is our response to the comments of the staff of the Division of Corporation Finance of the U.S. Securities and Exchange Commission (the "SEC") that were set forth in your letter to Mr. Gregory Rufus, dated April 20, 2010, with respect to the filing referenced above. For the staff's convenience, the text of the staff's comments is set forth below followed by our response.

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 your response to our prior comment 1. While we acknowledge that you provide year over year discussion and analysis of results of operations, our prior comment was intended to generate overview-type disclosure of how and why your operating performance has changed over the long term (i.e., not year over year discussion). We believe this information is important to investors given that your performance in 2009 is improved significantly when compared to several years prior. Based on the information in your response it would appear that this disclosure should include an explanation of why your gross profit percentage has increased. Please provide us with a copy of your intended revised disclosure.

RESPONSE: Thank you for clarifying your comment. We agree that disclosure, on an overview basis, describing the reasons for the improvement in our operating performance over the long term would be useful to investors. In that regard, we propose

disclosing our key competitive strengths and the elements of our business strategy that have been instrumental in achieving our operating performance improvement (including the gross profit percentage) from our formation through fiscal 2009. We have disclosed these items in certain of our past filings, such as Securities Act Registration Statements for the issuance of debt or equity securities, but we have not included these disclosures in our Annual Reports on Form 10-K in recent years.

In future filings, we will include a section entitled “Long-term Sustainable Growth” in the “Overview” section of Management’s Discussion and Analysis of Financial Condition of our Annual Report on Form 10-K. Our proposed revised disclosure, as it applies to the fiscal year ended September 30, 2009, follows:

“For fiscal year 2009, we generated net sales of \$761.6 million, gross profit of \$429.3 million or 56.4% of sales, and net income of \$162.9 million. We believe we have achieved steady, long-term growth in sales and improvements in operating performance since our formation in 1993 due to our competitive strengths and through execution of our value-driven operating strategy. More specifically, focusing our businesses on our value-driven operating strategy of obtaining profitable new business, carefully controlling the cost structure and pricing our highly engineered value-added products to fairly reflect the value we provide and the resources required to do so, has historically resulted in improvements in gross profit and income from operations over the long term.

Our selective acquisition strategy has also contributed to the growth of our business. The integration of certain acquisitions into our existing businesses combined with implementing our proven operating strategy has historically resulted in improvements of the financial performance of the acquired business.

Our key competitive strengths and the elements of our business strategy are set forth in more detail below.

We believe our key competitive strengths include:

Large and Growing Installed Product Base with Aftermarket Revenue Stream. We provide components to a large and growing installed base of aircraft to which we supply aftermarket products. We estimate that our products are installed on more than 63,000 commercial transport, regional transport, military and general aviation fixed wing turbine aircraft and rotary wing aircraft.

Diversified Revenue Base. We believe that our diversified revenue base reduces our dependence on any particular product, platform or market segment and has been a significant factor in maintaining our financial performance. Our products are installed on almost all of the major commercial aircraft platforms now in production.

Significant Barriers to Entry. We believe that the niche nature of our markets, the industry’s stringent regulatory and customer certification requirements, the large number of products that we sell, the relatively low unit cost as compared to

many other highly engineered aerospace products and the investments necessary to develop and certify products create significant practical barriers to entry for potential competitors.

Our business strategy is made up of two key elements: (1) a value-driven operating strategy focused around our three core value drivers and (2) a selective acquisition strategy.

Value-Driven Operating Strategy. Our three core value drivers are:

- *Obtaining Profitable New Business.* We attempt to obtain profitable new business by using our technical expertise, application skill and our detailed knowledge of our customer base and the individual niche markets in which we operate. We have regularly been successful in identifying and developing both aftermarket and OEM products to drive our growth.
- *Improving Our Cost Structure.* We attempt to make improvements to our cost structure through detailed attention to the cost of each of the products that we offer and our organizational structure, with a focus on reducing the cost of each.
- *Providing Highly Engineered Value-Added Products to Customers.* We focus on the engineering, manufacturing and marketing of a broad range of highly engineered niche products that we believe provide value to our customers. We have been consistently successful in communicating to our customers the value of our products. This has generally enabled us to price our products to fairly reflect the value we provide and the resources required to do so.

Selective Acquisition Strategy. We selectively pursue the acquisition of proprietary aerospace component businesses when we see an opportunity to create value through the application of our three core value-driven operating strategies. The aerospace industry, in particular, remains highly fragmented, with many of the companies in the industry being small private businesses or small non-core operations of larger businesses. We have significant experience among our management team in executing acquisitions and integrating acquired businesses into our company and culture. As of the date of this report, we have successfully acquired and integrated 27 businesses and/or product lines since our formation in 1993. Many of these acquisitions have been integrated into an existing TransDigm production facility, which enables a higher production capacity utilization, which in turn improves gross profit levels due to the ability to spread the fixed manufacturing overhead costs over higher production volume.”

2. We note your response to our prior comment 2, however it does not appear that you have quantified the amounts by which various factors impacted cost of sales. As such, we reissue our prior comment. Please revise to explain what you mean by each item, how specifically each item was a factor in decreasing cost of sales as a percentage of sales in the current period, and the amount by which this item 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. It does not appear that you addressed this portion of our prior comment in your response. Finally, please explain further the following sentence of your response which states, "The margin improvement was also due to increased sales attributable to the Company's ability to maintain its historical pricing policies, especially in the aftermarket, in spite of difficult market conditions." Please supplementally provide us with a copy of your intended revised disclosure and ensure your proposed disclosure is detailed and complete.

RESPONSE: In future filings, we will quantify and disclose significant factors that contributed to a change in the dollar amount of cost of sales. Although the cost of individual raw materials may vary, our total manufacturing costs comprising materials, labor and overhead generally have not reflected significant volatility on a historical basis that materially impacted our consolidated operating results. Therefore, the discussion of such components (other than the manufacturing workforce reductions in fiscal 2009) on a period over period basis was not a significant factor in the changes in cost of sales. Due to our acquisitive nature and the past trends in the aerospace component industry, changes in our cost of sales are often more attributable to our recent acquisitions in a given period and the current trends in the aerospace OEM versus aftermarket demand cycles. In addition, because the gross profit line and related variances gives consideration to items that more directly impact earnings, we plan to disclose and quantify factors to which we attribute a change in the dollar amount of gross profit on a period over period basis. Finally, our proposed revised disclosure no longer contains the sentence referenced in your comment.

Our proposed revised disclosure, as it applies to the fiscal year ended September 30, 2009, follows:

"Cost of Sales and Gross Profit. Cost of sales increased by \$4.4 million, or 1.4%, to \$332.2 million for fiscal year 2009 from \$327.8 for fiscal year 2008. The increase in the dollar amount of cost of sales was primarily due to increased volume associated with the higher net sales of \$47.8 million discussed above and higher acquisition-related costs of \$3.4 million, partially offset by the cost savings from the work force reductions discussed below.

Gross profit as a percentage of sales increased to 56.4% for fiscal year 2009 from 54.1% for fiscal year 2008. The dollar amount of gross profit increased by \$43.4 million, or 11.2%, to \$429.3 million for fiscal year 2009 from \$385.9 for fiscal year 2008. The increase in the amount of gross profit was primarily due to the following items:

- Sales of \$64.7 million from the acquisitions indicated above contributed gross profit of approximately \$23 million in fiscal year 2009, which includes the acquisition-related costs incurred in connection with those acquisitions. These acquisitions diluted gross profit as a percentage of sales for fiscal year 2009 by approximately 2 percentage points.
- Reductions in manufacturing workforce of approximately 10% which occurred from mid-calendar year 2008 throughout calendar year 2009. These reductions in manufacturing workforce were in response to an anticipated drop in overall commercial aerospace market sales. These workforce reductions resulted in cost savings which increased gross profit by approximately \$10 million in fiscal year 2009.
- Favorable product mix, meaning that the lower margin OEM product sales dropped more than the higher margin aftermarket product sales, favorable product pricing on our proprietary products and other cost reduction efforts partially offset by the impact of fixed overhead costs spread over lower production volume (excluding acquisitions). These factors resulted in increased gross profit of approximately \$10 million in fiscal year 2009 despite the decrease in organic sales.”

As requested, the Company acknowledges that: (1) it is responsible for the adequacy and accuracy of the disclosure in its securities filings; (2) the staff’s comments and changes to disclosure in response to the staff’s comments do not foreclose the Commission from taking any action with respect to the above-referenced filing; and (3) the Company may not assert the staff’s comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Should you have any questions or comments regarding the foregoing, please contact the undersigned at (216) 706-2959.

Very truly yours,

/s/ Gregory Rufus

Gregory Rufus
Executive Vice President, Chief Financial Officer and Secretary
TransDigm Group Incorporated