



DIVISION OF
CORPORATION FINANCE

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

June 18, 2010

Patrick E. Allen
Chief Financial Officer
Rockwell Collins, Inc.
400 Collins Road NE
Cedar Rapids, Iowa 52498

Re: Rockwell Collins, Inc.
Form 10-Q: For the quarterly period ended March 31, 2010
Filed April 23, 2010
File No. 001-16445

Dear Mr. Allen:

We have reviewed your response letter dated May 5, 2010 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 10 business days by confirming that you will revise your document in future filings and providing any requested information. 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-Q: For the quarterly period ended March 31, 2010

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, page 22

1. We have reviewed your response to our prior comment six, as well as the significantly expanded MD&A disclosure regarding segment results in your Form 10-Q for the quarterly period ended March 31, 2010. Your discussion of segment costs primarily focuses on the impact that fluctuations in certain identified costs had on your segments' operating earnings, without quantification of the actual amounts recognized for those costs. In this regard, we believe that quantification of the amount of costs recognized, rather than solely the change in such amounts, would enhance your overall discussion of segment results and provide additional context with regard to the significance of those changes which you have identified. For example, in your comparative analysis of Government Systems operating earnings for the three months ended March 31, 2010 and

March 31, 2009, you state that the segment realized incremental earnings of \$25 million from higher overall sales. We believe your disclosure could be enhanced by (a) quantifying the actual amount of costs directly attributable to products and services sold during each period and (b) discussing the factors, such as the changes in sales volume and/or acquisitions, which impacted the total costs incurred/recognized. Similarly, we believe that your disclosure would be more meaningful if, for each reporting period, you quantified the amounts recognized for items such as warranty costs and employee incentive compensation costs, rather than solely citing the change in the amounts recognized for those items. Please expand your MD&A disclosure to quantify the amounts recognized for each material classification of costs incurred by your segments – including each individually material component of cost of sales. In addition, please specifically identify and, as appropriate, analyze those factors that have directly impacted your segments' operating margin percentages, if not already apparent from your discussion and analysis of the fluctuations in each segment's revenue and costs. Provide us with your proposed expanded disclosure as part of your response.

Financial Condition and Liquidity

Cash Flow Summary

Operating Activities, page 33

2. Please refer to your response to our prior comment seven and the revised disclosure that was included in your Form 10-Q for the quarterly period ended March 31, 2010. We acknowledge that your revised discussion of cash provided by operating activities places greater emphasis on actual cash receipts and cash disbursements. However, it primarily addresses the change in the amounts reported in your statement of cash flows, while providing only a limited analysis of the actual amounts of cash generated from operations in each reporting period. Please expand your disclosure to provide a more comprehensive analysis of the actual cash provided by operating activities for each reporting period. For each reporting period, your expanded disclosure should identify, quantify and discuss the material sources and uses of cash – such as collections of receivables, receipts of customer advances, purchases of inventory, contributions to pension plans, payments for operating expenses, and/or other amounts, as applicable. Please provide us with your proposed expanded disclosure as part of your response.

Patrick E. Allen
Rockwell Collins, Inc.
June 18, 2010
Page 3

You may contact Jeffrey Sears at 202-551-3302 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,

Lyn Shenk
Branch Chief