

Mail Stop 3561

April 7, 2010

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

Re: Rockwell Collins, Inc.
File No. 001-16445
Form 10-K: For the fiscal year ended October 2, 2009
Form 10-Q: For the quarterly period ended December 31, 2009
Schedule 14A filed December 23, 2009

Dear Mr. Allen:

We have reviewed the above referenced filings and have the following comments. We ask you to revise future filings in response to some of these. 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 also ask 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 comments via EDGAR, under the label "corresp," within ten business days from the date of this letter.

Form 10-K: For the fiscal year ended October 2, 2009

Item 1A. Risk Factors, page 8

1. Please remove the statement that "Our business, financial condition, operating results and cash flows can be impacted by a number of factors, many of which are beyond our control, including but not limited to those set forth below and elsewhere in this Annual Report on Form 10-K..." In future filings, please remove this language as it suggests known material risks have not been disclosed.

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

Results of Operations, page 17

2. Please refer to your MD&A disclosure regarding both your "Consolidated Financial Results" and "Segment Financial Results." We note that while you appear to have identified the factors that materially impacted (i) your company's consolidated sales and costs and (ii) each segment's sales and "operating earnings," you have provided only limited quantification of the actual financial impact of those factors. In this regard, please revise your disclosure to quantify the financial impact of each factor that has materially affected either your consolidated results or your segment results.

Item 8. Financial Statements and Supplementary Data

Consolidated Statement of Shareowners' Equity, page 44

3. Please tell us why "Shares issued under stock option and benefit plans" have been recognized as a reduction to retained earnings. In this regard, tell us the nature of the shares issued and clarify whether or not the issuance of such shares ever results in a reduction to your reported income. As part of your response, please cite any accounting literature that you believe supports your accounting treatment.

Notes to Consolidated Financial Statements

Note 2. Significant Accounting Policies, page 45

4. Please tell us and expand your footnote to disclose your accounting policies related to the recognition of foreign currency translation gains and/or losses and foreign currency transaction gains and/or losses.

Form 10-Q: For the quarterly period ended December 31, 2009

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

Results of Operations, page 22

5. Please refer to your MD&A disclosure regarding your company's consolidated results of operations. We believe that it may be appropriate for you to provide a more complete analysis of the costs incurred for each of your comparable reporting periods. While we acknowledge that the expense amounts reported directly on your statements of operations were substantially flat for your comparable reporting periods, your current disclosure does not provide enough information for readers to determine whether the material cost components that comprise those reported amounts have fluctuated between the reporting periods. For example, it appears that during the first

quarter of fiscal year 2010, research and development (“R&D”) costs, which typically represent a significant portion of your reported “product cost of sales,” may have increased for your Government Systems segment and decreased for your Commercial Systems segment. However, it is unclear whether R&D costs, or other material components of product cost of sales, fluctuated on a consolidated basis. In this regard, please expand your MD&A disclosure to analyze the significant cost components that comprise each material expense caption presented on the face of your statements of operations, or advise. In addition, given that R&D costs have typically represented a significant portion of the total costs incurred/recognized by your company, consider whether it would be appropriate for your quarterly MD&A disclosure to include a more detailed analysis of such costs, similar to that which is provided in your annual report on Form 10-K. Please advise or revise.

6. Please refer to your MD&A disclosure regarding your segments’ financial results. We note that for each segment, you have identified the various expense categories (e.g., defined benefit pension expense, research and development expense, and selling, general, and administrative expense) for which costs have fluctuated for your comparable reporting periods. However, you have not quantified those fluctuations or discussed the underlying reasons for the fluctuations. Please expand your disclosure accordingly.

Financial Condition and Liquidity

Cash Flow Summary

Operating Activities, page 26

7. We note that your MD&A disclosure does not discuss or analyze your company’s cash flows from operations, or changes thereto, in terms of cash receipts and cash disbursements. In this regard, we note that references to (i) the changes in your working capital condition/performance and (ii) the fluctuations in specific balance sheet accounts (i.e., the reconciling items identified on the face of your statements of cash flows) may not sufficiently explain the changes in your actual cash receipts and cash disbursements, since you prepare your statements of cash flows using the indirect method. Similarly, we note that references to the change in your reported net income may not adequately explain changes in your reported cash flows from operations, since your net income is recognized based upon the accrual method of accounting. As an example, we note that although your reported net income declined by approximately \$30 million for the first quarter of fiscal year 2010, as compared to the first quarter of fiscal year 2009, your net cash flows from operations increased by approximately \$63 million for the first quarter of fiscal year 2010, as compared to the first quarter of fiscal year 2009.

In addition, we note that the timing of revenue and expense recognition under your long-term contracts may not necessarily correspond with the timing of cash receipts and disbursements under such contracts. For example, it would appear that the period of cash expenditures related to pre-production engineering and life-time buys could differ significantly from the period in which such costs are recognized in your income statement. Similarly, the period in which you recognize revenue under your long-term contracts may differ from the period in which amounts are billed and/or collected under the terms of your contracts.

Based upon the observations noted above, we believe that you should revise your discussion and comparative analysis of your company's cash flows from operations to place a greater emphasis on your company's actual cash expenditures and cash receipts. In this regard, we believe your revised disclosure should both quantify material changes in your cash receipts and cash disbursements, and discuss the underlying factors that resulted in such changes. Please revise your disclosure accordingly, or advise. In addition, provide your proposed expanded disclosure as part of your response. For further guidance, refer to Section IV.B of our interpretive release "Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations," which is available on our website at <http://www.sec.gov/rules/interp/33-8350.htm>.

Schedule 14A filed December 23, 2009

Certain Transactions and Other Relationships, page 8

8. We note your disclosure regarding the employment of the spouses of two executives, each receiving in excess of \$120,000 in total employee compensation. In future filings please disclose the names of the related persons pursuant to Item 404(a)(1) of Regulation S-K.

Compensation Discussion and Analysis, page 13

9. You state on page 16 that "The general industry peer group data is the primary source of market data." You state on page 21 that target awards for 2009 were "set around the median of the competitive data for each position" and on page 22 that you increased 2009 long-term incentive target awards in dollars for named executive officers "to align them with the median of the competitive marked data for the general industry peer group." You do not identify the companies in the general industry peer group. In future filings please identify the companies to which you benchmark and disclose the degree to which the compensation committee considers such companies comparable to you. Refer to Item 402(b)(2)(xiv) of Regulation S-K.

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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 comments, 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 filings; 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 filings or in response to our comments on your filings.

You may contact Jeffrey Sears at 202-551-3302 for questions regarding the financial statements and related matters or Dana Brown at 202-551-3859 for questions regarding Schedule 14A. You may also contact me at 202-551-3380.

Sincerely,

Lyn Shenk
Branch Chief