Via Fax & U.S. Mail

Mr. Lawrence E. Dickinson Chief Financial Officer 411 Fountain Lakes Boulevard St. Charles, Missouri 63301

Re: LMI Aerospace, Inc.

Form 10-K for the year ended December 31, 2008

Filed March 16, 2009 File No. 000-24293

Dear Mr. Dickinson:

We have reviewed your response letter dated May 27, 2009 and have the following comments. Unless otherwise indicated, we think you should revise your document in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that 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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Please respond to confirm that such comments will be complied with, or, if certain of the comments are deemed inappropriate, advise the staff of your reason. Your response should be submitted in electronic form, under the label "corresp" with a copy to the staff. Please respond within ten (10) business days.

Form 10-K for the year ended December 31, 2008

Statements of Cash Flows, page 47

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1. We note from your response to our prior comment 2 that you believe net presentation of the advances and payments on your revolving line of credit is appropriate because your credit agreement allows you to obtain advances and make payments on a daily basis and such activities usually involve large amounts. Please tell us if there is a contractual maturity date established on each of the borrowings. If the contractual maturity date is not less than three months, we believe that gross presentation, rather than net presentation is appropriate. If the borrowings are due on demand or there is a maturity date less than three months for each of the advances, we would not object to your net presentation. Please advise or revise future filings as appropriate. Please refer to paragraphs 11-13 of SFAS No. 95 for guidance.

Note 12. Acquisition of D3 Technologies, page 58

2. We note that your response to our prior comment 4 includes a description of the factors that contributed to a purchase price that results in the recognition of goodwill and indicates that none of the goodwill is expected to be deducted for tax purposes. Please confirm that you will include this disclosure in future filings.

Part IV, page 70

Item 15. Exhibits and Financial Statement Schedules, page 70

- 3. While we note your response to prior comment 6, all exhibits must be filed in full and include all attachments, exhibits, or schedules pursuant to Item 601 of Regulation S-K. The item enumerates specific instances where attachments, exhibits or schedules may be omitted; however, it does not appear that Exhibits 10.28 and Exhibit 10.40 are covered by these exceptions. Please re-file both Exhibit 10.28 and Exhibit 10.40 to include the entire agreement, including all exhibits and schedules. Alternatively, provide your legal analysis as to how these exhibits fall within those exceptions provided by Item 601.
- 4. Furthermore, please confirm that in all future filings you will file all exhibits in full, and include all attachments, exhibits and schedules.

Definitive Proxy Statement

Summary Compensation Table, page 22

5. We note your response to prior comment 8. Your disclosure here should include a statement that references certain sections as instructed in Instruction to Item 402(c)(2)(v) of Regulation S-K. Please confirm that in future filings you will include a statement that references those specific sections when you discuss the

Mr. Lawrence E. Dickinson LMI Aerospace, Inc. June 9, 2009 Page 3

assumptions made in the valuation of the restricted shares, in accordance with SFAS No. 123R.

You may contact Claire Erlanger at (202) 551-3301 or Jean Yu at (202) 551-3305 if you have questions regarding comments on the financial statements and related matters or Michelle Lacko at (202) 551-3240 if you have any questions regarding legal comments or matters. Please contact me at (202) 551-3813 with any other questions.

Sincerely,

Linda Cvrkel Branch Chief

VIA FACSIMILE (636) 916-2198