



DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

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

September 16, 2010

VIA U.S. MAIL and FACSIMILE

Thomas J. Paup
Chief Financial Officer
Arotech Corporation
1229 Oak Valley Drive
Ann Arbor, MI 48108

**Re: Form 10-K for the fiscal year ended December 31, 2009
Filed March 31, 2010
Form 10-Q for the fiscal quarter ended March 31, 2010
and June 30, 2010
File No. 000-23336**

Dear Mr. Paup:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. 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 ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2009

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 31

Critical Accounting Policies - Goodwill, page 35

1. Please expand this disclosure in future filings to address the reporting unit concept, including how you identified reporting units and how you allocated goodwill to those reporting units.
2. We reference the disclosure on page 35 that the cumulative book value of your reporting units exceeded your market value as of the impairment review but you determined that the fair value of the respective reporting units exceeded their respective carrying values and, therefore, there were no impairment charges related to goodwill. In future filings, for any reporting unit that is at risk of failing step one of the impairment test (e.g. it has a fair value that is not substantially in excess of the carrying value), please include the following disclosures:
 - Percentage by which fair value exceeded carrying value as of the date of the most recent test;
 - Amount of goodwill allocated to the reporting unit;
 - Description of the methods and key assumptions used and how the key assumptions were determined;
 - Discussion of the degree of uncertainty associated with the key assumptions. The discussion regarding uncertainty should provide specifics to the extent possible (e.g., the valuation model assumes recovery from a business downturn within a defined period of time); and
 - Description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

Results of Operations - Fiscal Year 2009 compared to Fiscal Year 2008, page 42

3. We see that you recognize revenue from the sale of products, long-term contracts, and maintenance and support arrangements. To enhance a reader's understanding the nature of you revenues, please revise future filings to quantify the amount of revenue recognized by type of arrangement.

Liquidity and Capital Resources, page 45

4. We reference your statement that the increase in cash provided by operating activities from 2008 to 2009 was the result of changes in working capital. In that regard, we note that accounts receivable and accounts payable significantly decreased from December 31, 2008 to December 31, 2009. Future filings should include a discussion of the underlying reasons for and the impact of significant changes in financial condition, including changes in working capital. Refer to Item 303 of Regulation S-K.

Item 9A. Controls and Procedures, page 47

5. We note your disclosure regarding your officers' conclusions about the effectiveness of the Company's disclosure controls and procedures. While you are not required to include the definition of disclosure controls and procedures in your conclusion, when you do, all of the language that appears following the word "effective" in your conclusion must be consistent with and not modify the language that appears in the definition of "disclosure controls and procedures" set forth in Rule 13a-15(e) of the Exchange Act. Alternatively, you may remove that definition. Please revise in future filings.

Consolidated Financial Statements

Consolidated Statements of Operations, page F-4

6. We note from page 44 that the line item "allowance for settlements" represents the deemed loss on contract-related litigation with NAVAIR and the write down of a receivable. Please tell us why these amounts are not presented within operating profit (loss) since they appear to be related to your operating activities.

Note 1. General, page F-9

c. Acquisition of AoA, page F-9

7. We see that you recorded a gain of \$1.4 million during 2008 related to the settlement of a contingent earn-out obligation in connection with the acquisition of AoA. Please tell us the accounting basis for recognizing the "adjustment" as a gain rather than as a reduction in the cost of the acquired entity. Please refer to paragraph 27 of SFAS 41.

i. Revenue Recognition, page F-15

8. Regarding your revenue recognition policy for revenues from products and simulators, please revise future filings to disclose when the criteria listed are

usually met. That is, disclose if revenue is recognized at shipment or customer acceptance and discuss the nature of any obligations that may preclude you from recognizing revenue.

j. Right of return, page F-16

9. Please clarify in your response and in future filings if you also defer the cost of revenues when a right of return exists.

q. Fair value of financial instruments, page F-18

10. Please tell us where you have provided the disclosure required by FASB 820-10-50-1 and 2 for fair value measurements on a recurring basis. In this regard, we see that you have derivative liabilities that are recorded at fair value and remeasured at each reporting date.

Note 8. Goodwill and Other Intangible Assets, page F-23

11. Please clarify in future filings if the business segments disclosed in this footnote also represent your reporting units for goodwill purposes under FASB ASC 350-20-35-33 through 38.

Note 12. Convertible Debt, Detachable Warrants and Other Long-Term debt, page F-28

12. Regarding the reclassification of the warrants, conversion option and puts as derivative liabilities during fiscal year 2009, please explain to us how you analyzed the terms of the features under FASB ASC 815-40-15 in determining the appropriate classification. In your response, please discuss the terms of the warrants and the conversion and put options that required reclassification from equity to liability. Future filings should also include a more detailed discussion of the specific terms and accounting for the warrants and other debt features classified as liabilities.

Note 16. Segment Information, page F-40

13. Please revise future filings to disclose the nature of the column "all others." Please clarify if this is a reportable operating segment or if it represents corporate headquarters that is not deemed to be an operating segment. Refer to the disclosure requirements of FASB ASC 280-10-50-30 and 31.

Form 10-Q for the fiscal quarter ended March 31, 2010 and June 30, 2010

Exhibit 31.1 and 31.2

14. We note that you omitted the language in paragraph 4 of Item 601(b)(31)(i) of Regulation S-K that refers to internal control over financial reporting. Please file an amendment to the Forms 10-Q that provides currently dated and signed certifications in the form set forth in Item 601 to Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

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

You may contact Kristin Lochhead at (202) 551-3664 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. In this regard, please do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any other questions.

Sincerely,

Brian Cascio
Accounting Branch Chief