

Mail Stop 4561

March 1, 2007

Lawrence Rychlak
Executive Vice President and Chief Financial Officer
Avatech Solutions, Inc.
10715 Red Run Boulevard, Suite 101
Owings Mills, MD 21117

**RE: Avatech Solutions, Inc.
Registration Statement on Form S-1
Filed on February 2, 2007
Commission File No. 333-140418**

Form 10-K for the fiscal year ended June 30, 2006

Dear Mr. Rychlak:

We have limited our review of your filings to the matters addressed by the following comments. Where indicated, we think you should revise your documents 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement on Form S-1

Selling Stockholders, page 3

1. Please provide a materially complete discussion of how the selling shareholders acquired the securities that you are registering on their behalf for resale. The background of the issuances to the selling shareholders and the nature of the arrangements, agreements, and relationships with the company does not appear to be complete and should include, for each selling security holder, a discussion of the date of the transaction in which the securities were sold, the amount of securities sold, the agreement(s) that evidence the sale, the instrument(s) that define the rights of the security holders, and the private placement agent, if any. Your disclosure should also include a description of the material terms of the warrants held by the relevant selling security holder.
2. With respect to the shares to be offered for Sigma Capital Advisors, please disclose the individual or individuals who exercise the voting and/or dispositive powers. Refer to Interp. I.60 of Telephone Interp. Manual (July 1997) and Interp.4S of Reg. S-K section of 3/99 Supp. to Manual.

Plan of Distribution, page 4

3. In your plan of distribution, you indicate that selling security holders may create short positions in the common shares in connection with the offering. In your response letter, please advise us that Avatech Solutions and the selling security holders are aware of CF Tel. Interp. A.65.

Part II – Information Not Required in Prospectus

Undertakings

4. It is not necessary to provide all of the undertakings contained in Item 512(a)(5). If you intend to rely on Rule 430C, please provide the undertaking contained in Item 512(a)(5)(ii). If you intend to rely on Rule 430B, please provide the undertaking contained in Item 512(a)(5)(1). Revise as appropriate.

Form 10-K for year ended June 30, 2006

Item 9A. Controls and Procedures

5. We note your statement that a “control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the internal control system are met.” Please revise to state clearly, if true, that your disclosure controls and procedures are *designed to* provide reasonable

assurance of achieving their objectives and that your principal executive officer and principal financial officer concluded that your disclosure controls and procedures are effective at that reasonable assurance level. In the alternative, remove the reference to the level of assurance of your disclosure controls and procedures. Please refer to Section II.F.4 of Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, SEC Release No. 33-8238, available on our website at <http://www.sec.gov/rules/final/33-8238.htm>.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

Mr. Lawrence Rychlak
Avatech Solutions, Inc.
March 1, 2007
Page - 4 -

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rule 460 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Jay Ingram at (202) 551-3397 if you have questions. If you require further assistance, please contact me at (202) 551-3462, or the Assistant Director, Barbara C. Jacobs at (202) 551-3735.

Sincerely,

Mark P. Shuman
Branch Chief

cc. Christopher Olander, Esq.
by facsimile: 301-406-1207