

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

December 8, 2011

Via E-mail
Mr. Garrett E. Pierce
Vice Chairman and Chief Financial Officer
Orbital Sciences Corporation
21839 Atlantic Boulevard
Dulles, VA 20166

Re: Orbital Sciences Corporation

Form 10-K for the fiscal year ended December 31, 2010

Filed February 28, 2011

Form 10-Q for the quarter ended September 30, 2011

Filed October 27, 2011

File No. 1-14279

Dear Mr. Pierce:

We have reviewed your filing 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 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, 2010

Management's Discussion and Analysis of Financial Condition and Results of Operations

1. We note your discussion of the research and development costs incurred in connection with the Taurus II development program on page 31. Please quantify within this discussion the total amount of expenses that have been treated as allowable costs under your government contracts even though the government has not yet made a final determination. Provide similar disclosure within financial statement footnote 9.

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Financial Statements

Balance Sheet, page 48

- 2. We note in the first paragraph on page 39 that under the terms of the CRS contract, a substantial percentage of the customer cash receipts are billable and collectible only upon successful launch of each vehicle, the first of which is scheduled to occur in 2012. In light of this, it appears any recorded receivables relating to the CRS contract should be classified as non-current assets within your year-end balance sheets. Please explain to us your policy for classifying these amounts within your balance sheet.
- 3. Furthermore, we note on page 60 that unbilled accounts receivable include amounts that become due incrementally over periods of up to 15 years. Explain to us your basis for classifying these amounts as current assets in your balance sheet.

Note 1. Revenue Recognition, page 51

- 4. We note it is your policy to include incentive and award fees in estimated contract revenue at the time the amounts can be reasonably determined and are reasonably assured based upon historical experience and other objective criteria. We also note as a result of the launch failure of your Taurus XL rocket on March 4, 2011, you reduced revenue and operating profit on the Taurus contract pertaining to a mission success incentive that was not earned. In light of the uniqueness of your highly technologically complex products, please explain to us in detail how you are able to estimate total contract revenue with reasonable accuracy and conclude that ultimate realization is reasonably assured.
- 5. In regard to the above comment and with a view toward expanded policy disclosure, please address each of the following questions so that we may fully understand your revenue recognition policy and how you implement this policy in practice.
 - a. Explain to us the basis for your policy in the GAAP literature.
 - b. Explain to us the timing of when you determine you are able to estimate total contract revenue with reasonable accuracy and conclude that ultimate realization is reasonably assured. For example, do you normally conclude ultimate realization is reasonably assured prior to the launch of a new product?
 - c. Explain the nature of the historical experience and other objective criteria that you are relying upon. Clarify if this historical experience is specific to a particular product, such as the Taurus XL rocket, or are you placing reliance upon your experience with all of your launch vehicles.
 - d. Explain any circumstance where you did not include incentive and award fees in estimated contract revenue because the amounts could not be reasonably determined and were not reasonably assured based upon historical experience and other objective criteria.

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e. We note the COTS and the Taurus II rocket are currently under development. Tell us if you are recognizing any revenue from incentive and award fees in connection with these products.

Note 9. Commitments and Contingencies, page 69

<u>Terminated Contracts</u>, page 70

6. If material, quantify the amount recorded as an adjustment to revenue upon termination of the Orion Launch Abort System contract and the Kinetic Energy Interceptor contract here and within MD&A, and advise us.

Please file all correspondence over EDGAR. 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 Dean Suehiro, Senior Staff Accountant, at (202) 551-3384 or Robert S. Littlepage, Accountant Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact Ajay Koduri, Staff Attorney at (202) 551-3310 or me at (202) 551-3810 with any other questions.

Sincerely,

/s/ Robert S. Littlepage for

Larry Spirgel Assistant Director